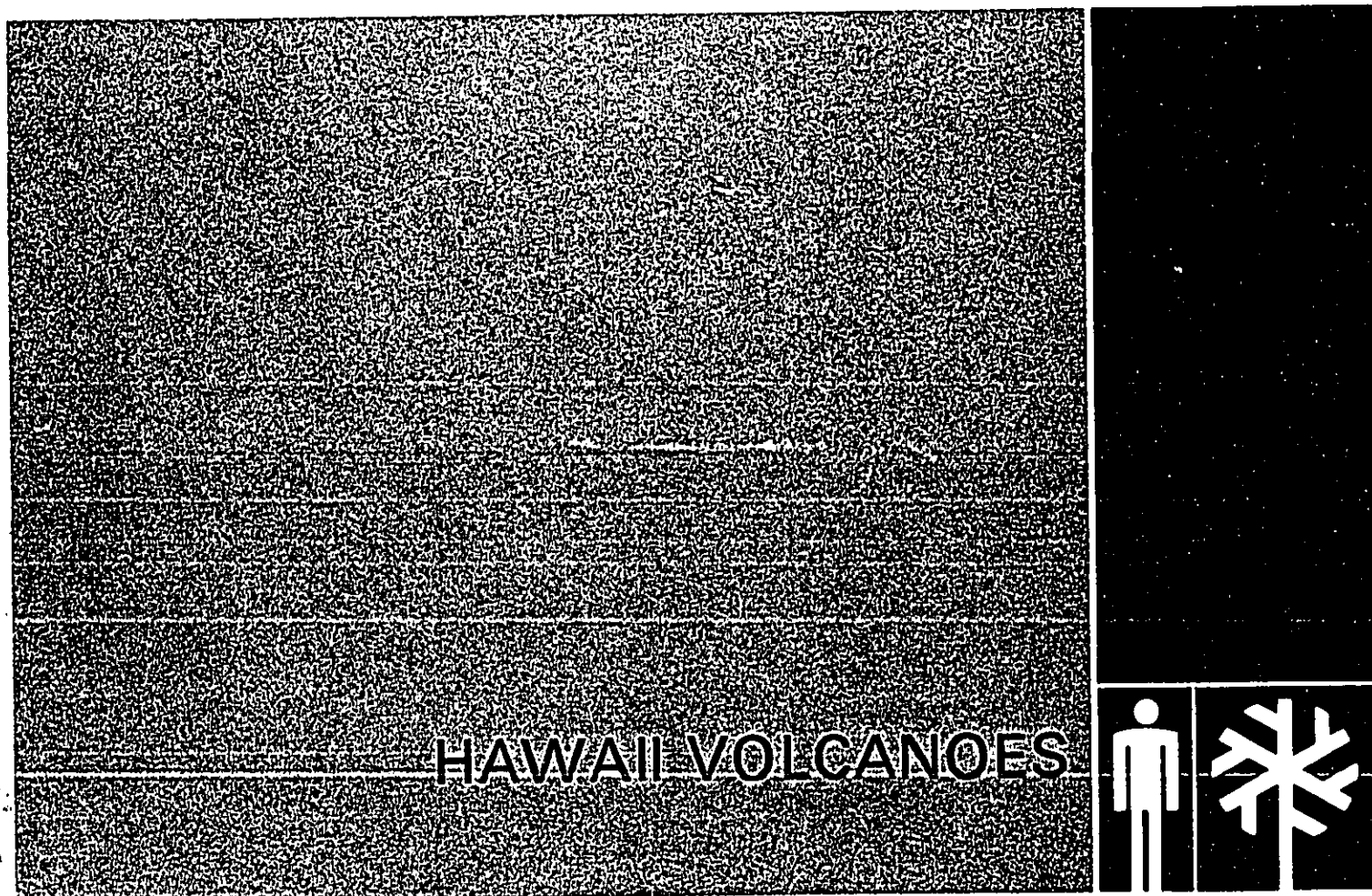


final environmental statement  
proposed wilderness  
FES 75-55

June 1975



NATIONAL PARK / HAWAII

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DEPARTMENT OF THE INTERIOR

FINAL

ENVIRONMENTAL STATEMENT

FES 75-55

Proposed

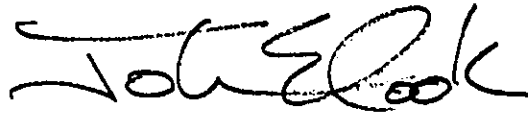
WILDERNESS AREAS

HAWAII VOLCANOES NATIONAL PARK

HAWAII

Prepared by

Western Region  
National Park Service  
Department of the Interior

A handwritten signature in dark ink, appearing to read "J. W. E. Look", is written over a horizontal line.

Director

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For OEQC

SUMMARY

( ) Draft (X) Final Environmental Statement

Department of the Interior, National Park Service, Western Region

1. Type of Action: ( ) Administrative (X) Legislative

2. Description of Action: The National Park Service proposes that 123,100 acres, consisting of 4 units, be designated as wilderness within Hawaii Volcanoes National Park. An additional 7,850 acres in Units 2 and 3 are proposed as potential wilderness additions, to be added to wilderness by the Secretary of the Interior when they qualify under the terms of the Wilderness Act. The total wilderness, original proposal and potential additions, will comprise 62% of the park's total acreage of 210,667.

3. Summary of Environmental Impact and Adverse Environmental Effects: This wilderness proposal will preserve diverse segments of the Island of Hawaii in an undeveloped state--from the 13,680-foot summit of Mauna Loa to the Puna and Kau Coasts, and landscape ranging from barren lava to dense tropical forests and dry coastal reaches with numerous archeological sites. Dominant impacts are scientific, cultural, and social in that much of the park will be retained in an undeveloped state, thereby preserving its unique resources while still providing for public use. Other impacts include strict control of research projects, increased management and research costs, and eventual rationing of recreation use.

4. Alternatives Considered: A. No Wilderness Designation. B. Inclusion of Concentrated Research Area in Upper Kau Desert. C. Inclusion of Portions of the Kalapana Extension. D. Designation of the Entire Chain of Craters and Adjacent Palis Mauka as Wilderness. E. Exclusion of a Coastal Strip from Wilderness. F. Exclusion of the Jeep Road to the Summit of Mauna Loa. G. Inclusion of the Hilina Pali Road Corridor in Wilderness.

5. Comments Have Been Requested From the Following:

*Advisory Council on Historic Preservation	*Environmental Protection Agency
*Department of Agriculture	*State of Hawaii Clearinghouse
Soil Conservation Service	*State Historic Preservation Officer
Department of Defense	Metropolitan Clearinghouse
*U.S. Army	*Audubon Society
*Department of the Interior	Bishop Museum
*Bureau of the Indian Affairs	*Congress of the Hawaiian People
*Bureau of Mines	*Life of the Land
*Bureau of Land Management	Sierra Club
*Bureau of Outdoor Recreation	*Society of American Foresters
*Bureau of Reclamation	The Hawaiians
*Fish and Wildlife Service	The Nature Conservancy
*Geological Survey	*University of Hawaii
*Department of Transportation	*Wilderness Society

6. Date Made Available to CEQ and the Public:  
Draft Statement: October 26, 1973  
Final Statement: June 12, 1975

\*Comments Received and Attached

#### DESCRIPTION OF THE PROPOSAL

Hawaii Volcanoes National Park lies on the southeast slopes of the Island of Hawaii, largest of the Hawaiian chain. Contained within the park's current boundaries is a combination of geological, biological, and historic resources. Mauna Loa and Kilauea, two of the most active volcanoes in the world, are the two dominant geographical features and the main attraction for visitors. But there are also significant endemic communities of plants and animals on the slopes of these volcanoes that require particular care in management and planning to guarantee that they will survive competition with introduced species and continue to be available as part of the Nation's cultural heritage. Further, volcanic research, with facilities necessary throughout the park, is equal in importance to the conservation/public use aspects. The research programs, the physical landforms, special management programs, unique legal provisions, and projected visitor-use plans all control the size and configuration of wild lands suitable for consideration as wilderness.

The master plan, prepared in conjunction with the wilderness proposal, defines appropriate uses and proposes that additional lands (approximately 105,400 acres) be added to the authorized park boundary to further the purposes of the park. This wilderness proposal, however, includes only lands within the current authorized boundary. The foremost attraction within the park will continue to be Kilauea Caldera where the visitor will be able to view, at close range, the wealth of volcanic features and the eruptions that occur there. When new eruptions occur elsewhere, such as the current one at Mauna Ulu, they too will be interpreted, and, if possible, access afforded.

For the visitor who travels by private car and wishes to spend more time, additional attractions will invite his attention: the Olaa fern forest, vast primitive areas around Mauna Loa's summit, remote coastal stretches, and many historical, archeological, and cultural exhibits of Hawaii's provocative past.

Activities will include fishing, nature walks, camping, hiking, picnicking, and pleasure driving. Campgrounds and hotel accommodations will continue to be provided for those few visitors who remain in the park for more than one day.

Research and management of resources are more important here than perhaps at any other unit in the National Park System. This is not only because of the legislative mandate concerning volcanic research, but also because of the great problems encountered in maintaining a stable ecosystem when competing exotic plant and animal species wreak destruction on the many endemic populations that exist nowhere else in the world.

Regarding the general pattern of use, there will be little change as a result of master plan proposals. The major change will come about as visitation increases, as facilities are improved, and as interpretation encourages the visitor to remain longer in the park to see the remote areas that have previously been enjoyed by only a few visitors. Three use zones have been identified as a framework for the manner and intensity of visitor use as well as the management of resources.

The primary use zone encompasses those attractions that are most popular with visitors, namely Kilauea Volcano, the Kalapana Coast, and the Chain of Craters Road that joins them. Time is limited, and most visits to this zone are strictly structured to adhere to a bus tour schedule.

The wilderness threshold zone will help stimulate interest in the intimate details of the park environment. Visitors to this zone will be willing to spend more time and energy to explore and enjoy inherent resources. Also, they will be almost entirely local island residents and off-island visitors who rent cars. Access will be on low standard roads and short trails. And this zone will serve as an introduction to the large units of park backcountry that lie beyond road termini and trailheads.

The backcountry is the largest zone and, as with most other parks, will require the lightest use in regard to visitors per acre. Visitors here will have considerable time and energy to enjoy long hikes and camp overnight in order to see and appreciate the park's extensive roadless areas. It is this zone that encompasses those lands considered suitable for wilderness. Thus, in accordance with Public Law 88-577, dated September 3, 1964, it is proposed to designate four wilderness units, totaling 123,100 acres, within the existing boundaries of Hawaii Volcanoes National Park. An additional 7,850 acres in Units 2 and 3 are proposed for designation as potential wilderness additions. These lands are also within the authorized boundary but are now in private ownership. They will be added to the wilderness by the Secretary of the Interior when the Federal Government obtains title to the land.

These potential wilderness additions and three other special provisions are proposed to be included in the designating legislation to allow the latitude necessary for management to adequately cope with the park's unique resource problems:

1. Since there is no surface water in the backcountry available for visitor use, it is proposed that a tank to store water runoff from the roof of each of the existing and proposed trail shelters be allowed in Hawaii Volcanoes wilderness.

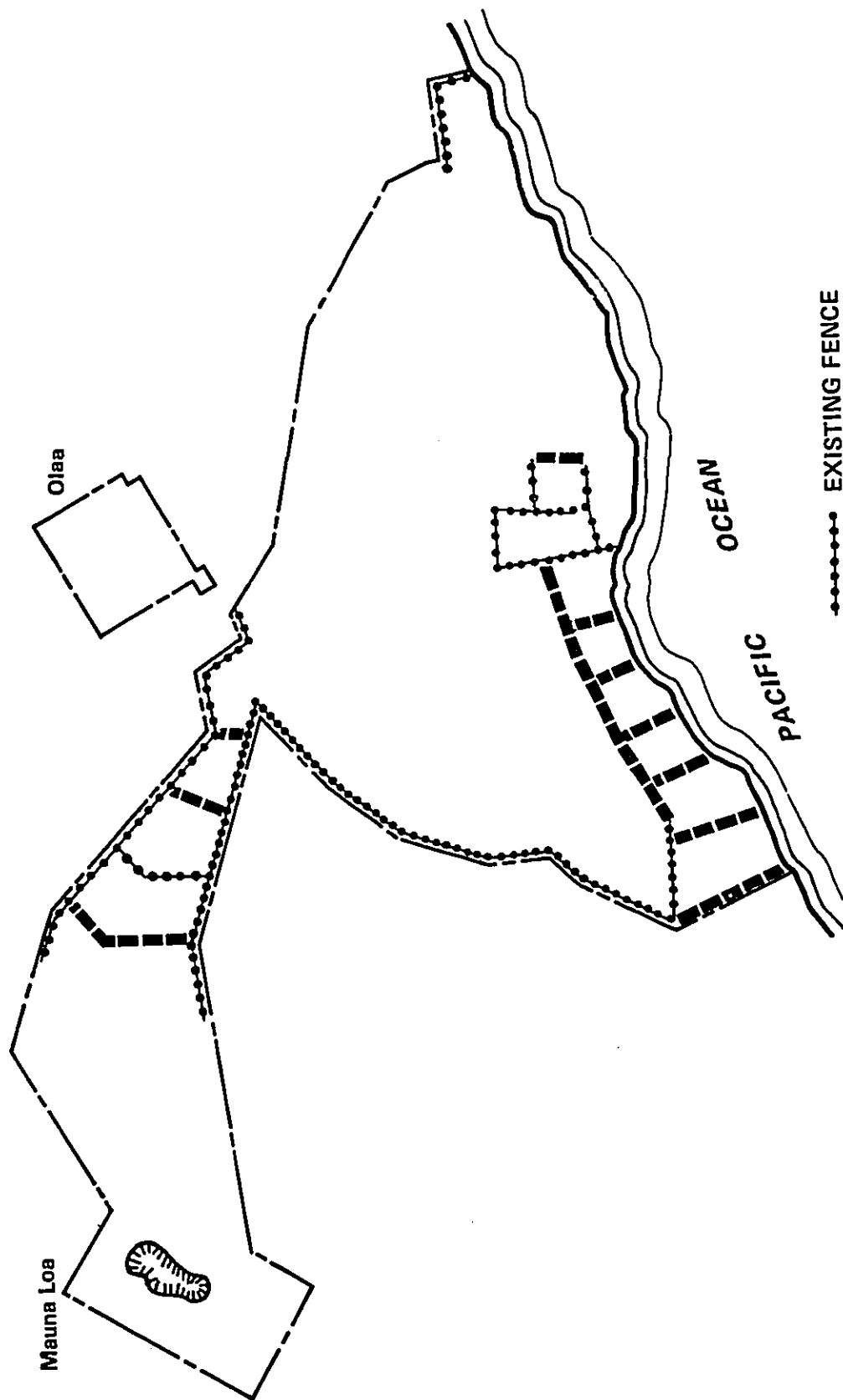


2. Volcanic research is equal in importance to visitor use and the minimum tools to accomplish this research include various instruments and access by helicopter for transport and servicing. Existing installations are noted on a map on page 5. It is proposed that this operation be continued within Hawaii Volcanoes wilderness units. Included in this provision will be permission for four-wheel-drive vehicles to drive to the summit of Mauna Loa on the north side for research purposes only.
3. Two potential wilderness additions are proposed. One of about 2,000 acres and the second about 5,800 acres. It is recommended that a special provision provide the Secretary of the Interior with the authority to designate these lands as wilderness when he deems they qualify.
4. As proposed in the master plan and resources management plan, certain minimum tools such as fencing are considered necessary to protect native populations from feral animals, particularly goats. The proposed special provision will provide for continuation of whatever fence system is considered necessary to control feral goats, mostly in Units 1 and 2. The existing fences and current proposal for additional fences are shown on a map on page 4 of this statement.

The wilderness proposal for Hawaii Volcanoes will preserve approximately 62 percent of the park's acreage unaltered by the hand of man. Here, the visitor will have the opportunity to experience a sense of solitude in a variety of landscapes that range from barren high-elevation lava fields to dense rain forests and extensive tropical coastal regions. Moreover, assuming that the special provisions are allowed, disappearing species of Hawaiian plants and birds will be afforded an excellent opportunity for survival. And these, too, will be available for both visitor enjoyment and for scientific research. The four proposed wilderness units are delineated on the map on page 8 as follows:

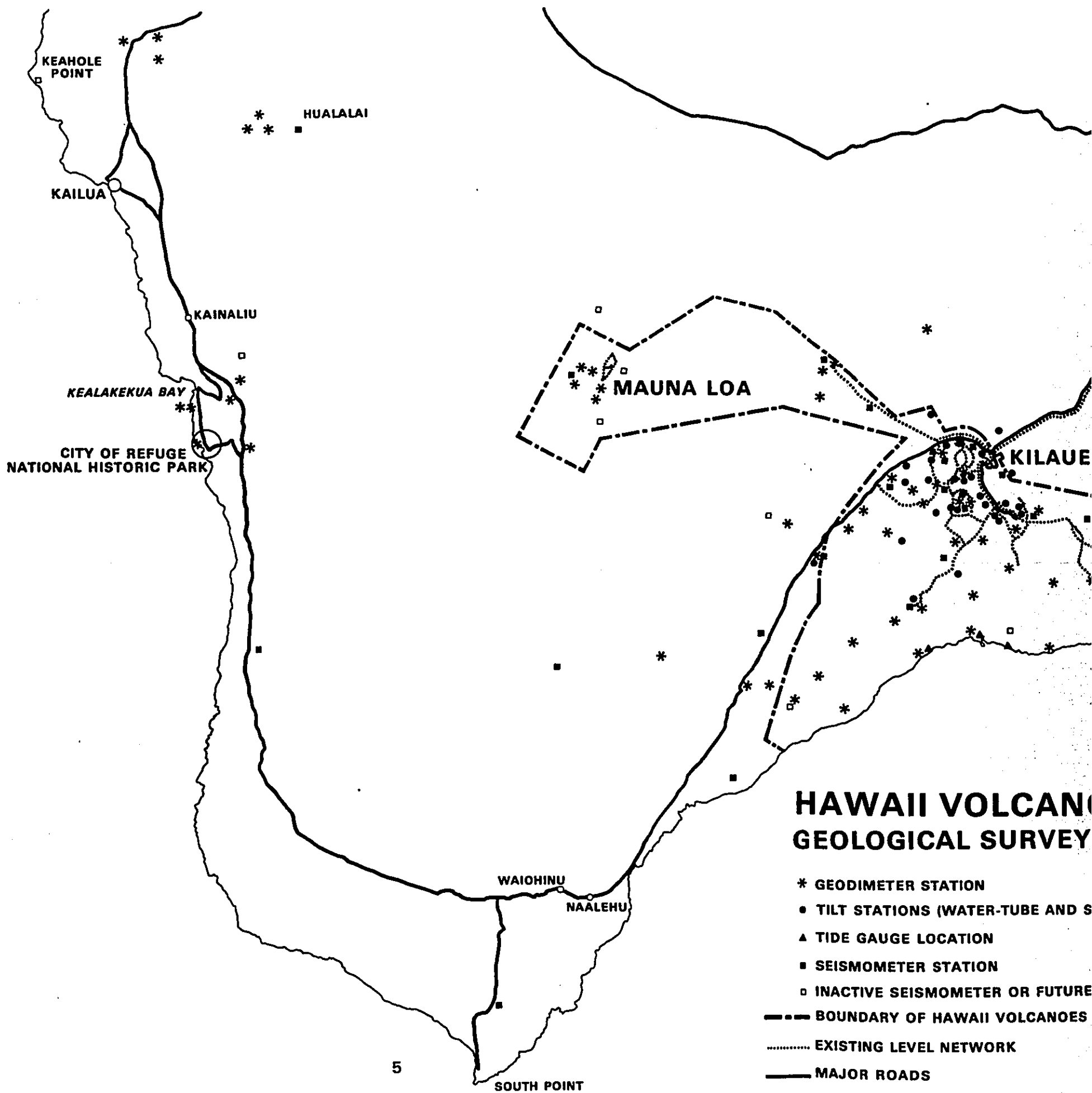
#### UNIT 1

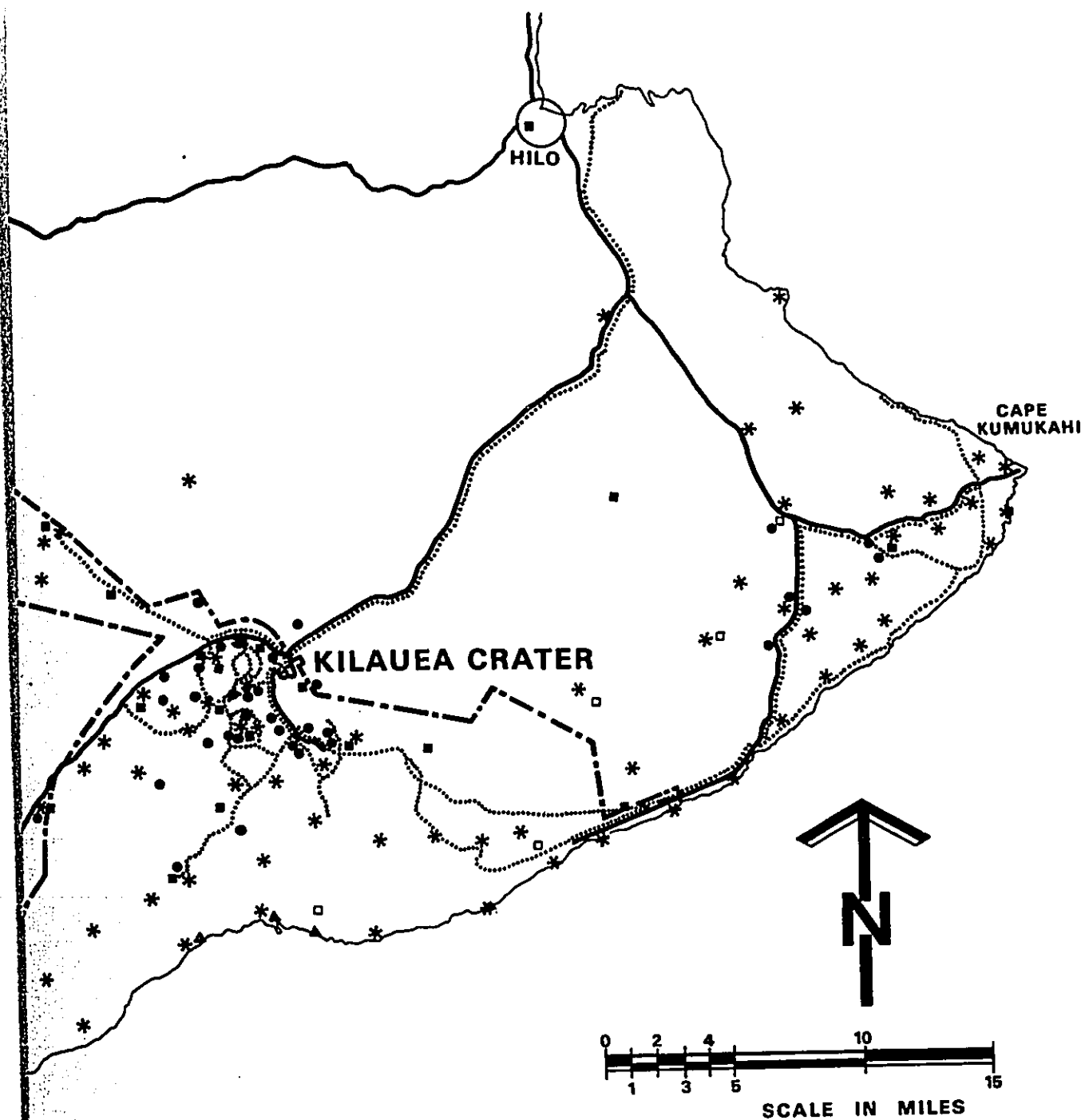
This largest of the proposed units, 58,500 acres, lies at the summit and upper slopes of Mauna Loa; consists mostly of barren land flows, craters, and cinder cones; and is subject to periodic volcanic activity. It will preserve the entire Mokuaweoweo Caldera and sections of the two main rift zones in wilderness. Because of the high elevation (4,700 to 13,680 feet) and the character of the landscape, the forces of nature predominate almost entirely. Thus, visitors will be afforded an experience of primeval solitude and scientists an undisturbed outdoor laboratory.



**GOAT FENCES**

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# **HAWAII VOLCANOES NATIONAL PARK** **GEOLOGICAL SURVEY RESEARCH INSTALLATIONS**

- GEODIMETER STATION
- TILT STATIONS (WATER-TUBE AND SPIRIT-LEVEL)
- △ TIDE GAUGE LOCATION
- SEISMOMETER STATION
- INACTIVE SEISMOMETER OR FUTURE SEISMOMETER STATION
- BOUNDARY OF HAWAII VOLCANOES NATIONAL PARK
- - - EXISTING LEVEL NETWORK
- MAJOR ROADS

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On the north, west, and south sides, the proposed wilderness line lies along the park boundary. Adjacent lands outside the park are almost all unvegetated lava flows. On the east, the proposed boundary extends down the Mauna Loa Strip to slightly below the paved Mauna Loa Strip road, but excluding it and an existing powerline at an elevation of about 4,700 feet. Here, the adjacent land inside the park is designated as a light-use wilderness threshold zone. Outside the boundary is forest and grazing land. Visitors wishing to ascend Mauna Loa from the north side will leave their vehicles at a parking area outside the current park boundaries and several miles below the Mauna Loa weather observatory.

Four cabins will be retained in this unit. These are primarily for ranger patrol use, but will be open for visitors in this high-elevation area as they will encourage camping in specific controlled locations and provide needed shelter. Two of these shelters, at Red Hill and Mauna Loa's summit, will be retained in their present location. Two others will be relocated to sites better related physically to the other cabins and thus more adequately serve visitor and management needs. The specific sites themselves will be determined later.

#### UNIT 2

This is an area of 56,900 acres, encompassing much of the Kau Desert coastal area and most of the roadless area between the coast and pali (cliffs). The shoreline, thus unprotected, is the longest stretch of undeveloped coastline in the Hawaiian Islands. From the mauka (inland) pali are superb views of ocean, coastal plains, fault scarps, and broad open areas where unique species of endemic plants and animals still survive.

With regard to visitor use, this is the most attractive part of the backcountry, though use is still light. An extensive trail system exists, both along the pali and on the coast. Halape is a major destination area because there is shelter, good fishing, a coconut grove, and some fresh water. The latter two are currently not available elsewhere along the coastline within wilderness Unit 2. Two additional catchments do exist, however, within the roadless area east of the proposed boundary at Keauhou Landing and Apua Point. There is also an existing shelter inland at Pepeiau within proposed wilderness Unit 2, used by management as a patrol cabin, but also open to visitors.

The proposed wilderness follows the northwestern park boundary from the coast to 1/4 mile south of State Route 11, but excludes 2,050 acres of private land in the southwest corner as a potential wilderness addition. Adjacent land outside the boundary is used for grazing and agriculture. From State Route 11, the line runs generally southeast

across the Kau Desert to Puu Ohale, excluding these lands southwest of Kilauea Caldera, where there is little or no visitor use but where intensive research activities are undertaken by the U.S. Geological Survey. Their facilities include jeep roads and seismic lines, tilt stations, seismometers, and geodimeter stations.

The line then excludes the Hilina Pali road, a major visitor and management access route to the backcountry area below the top of Hilina Pali and the coast. It then continues southeasterly, crossing the former Ainahou Ranch, to the Kalapana Extension boundary. From there, the line follows the line of the Kalapana Extension to the coast and southwest along the coast to the point of beginning. Kalapana Extension land, although much of it is roadless, has been excluded from the proposal because of the 1938 act. That act authorized this extension, but also enabled the Secretary of the Interior to lease homesites to Hawaiians, under certain conditions.

To encourage additional backcountry use of the coastal area, three additional backcountry rain catchments are proposed along the coast between Halape and Kapao Point. These are considered as the necessary minimal shelter and water for backcountry users in this harsh dry environment.

### UNIT 3

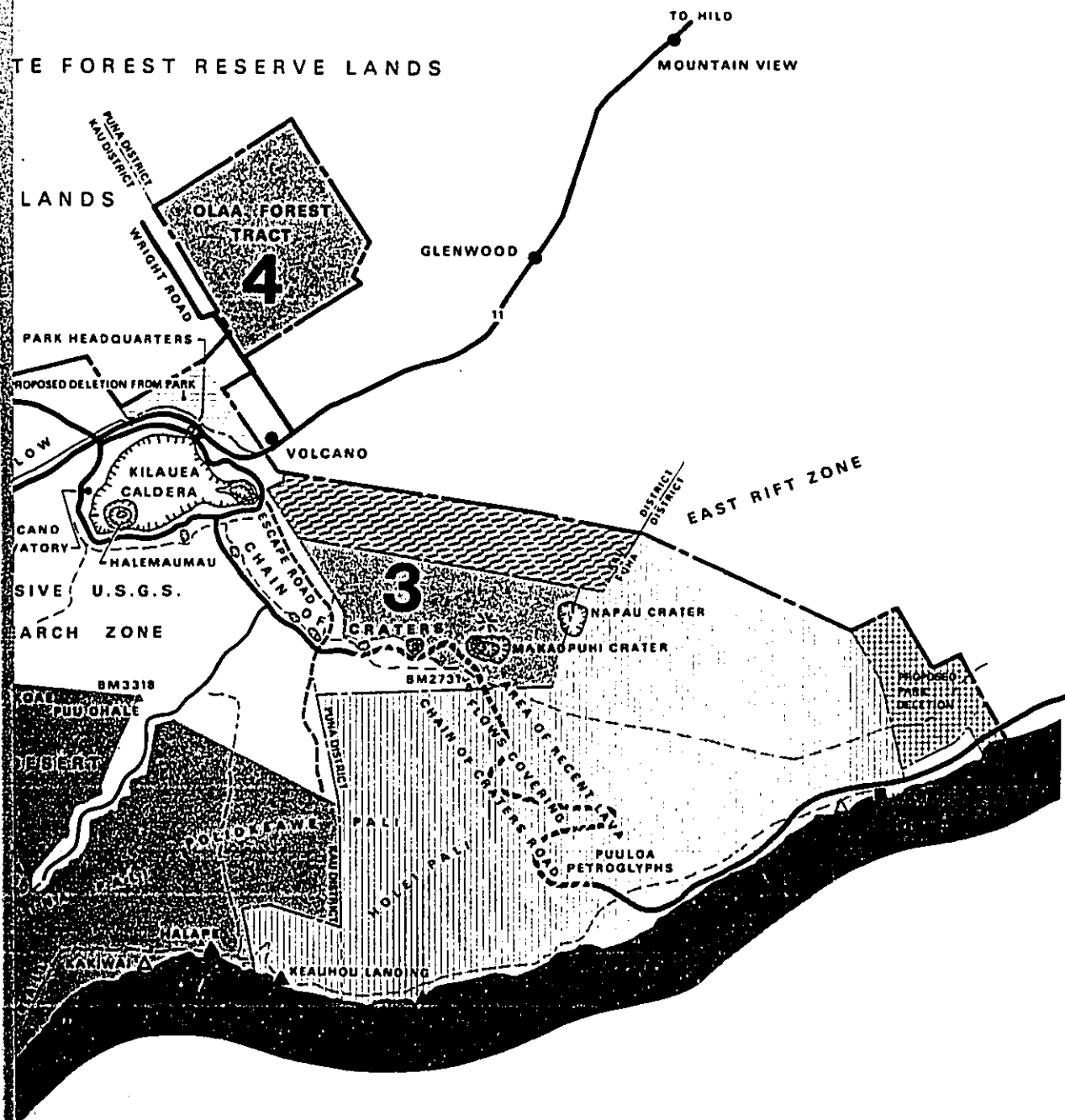
This unit, about 7,600 acres, includes portions of the Chain of Craters along Kilauea's east rift zone and a native ohia/fern forest. This is a particularly dynamic landscape where frequent volcanic eruptions destroy whole sections of native forest. But here regeneration of vegetation is more rapid because of heavy rainfall. It is also adjacent to one of the park's most frequently visited areas outside wilderness, including Kilauea Caldera and portions of the Chain of Craters.

The proposed northeastern boundary follows a line parallel to and approximately 7,000 feet from the park's northeastern boundary. On the west, the line follows the common boundary of the Puna/Kau Districts and the common boundary of the ahupua'a (land division) of Apua and Panau Nui. The southern and eastern wilderness lines follow district boundaries and the Kalapana Extension boundary, respectively.

The portion of the existing Chain of Craters/Kalapana road now covered by lava will be realigned to avoid the main mass of new flows from Mauna Ulu (a new volcanic vent not shown on the map). Thus, wilderness Unit 3 will include a small portion of land formerly crossed by the road.

Along the northeastern side, a 5,800-acre tract of private land is proposed as a potential wilderness addition. Land outside the boundary to the northeast is also covered with ohia/fern forest and little used at this time.





# EXHIBIT A

## WILDERNESS PLAN

### HAWAII VOLCANOES NATIONAL PARK

#### HAWAII

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#### UNIT 4

This is the Olaa Forest Tract, and will include 10,100 acres of the finest example of native Hawaiian ohia/fern forest. This wilderness proposal includes the entire tract, except for the small detached unit on the west side of Wright Road. It will be utilized for public use with a parking area and nature trail. The area proposed as wilderness is also proposed as a research natural area to be perpetuated as a native ecosystem for scientific research with no development. It is surrounded by similar forest lands, some of which have been logged, farmed and/or subdivided.

Although the tract is Federal land and under protective custody of the National Park Service, it may not have official national park status. Under the terms of the 1938 act to add lands to the park, it was stipulated that all such lands be contiguous to the existing boundary. Since it is not now proposed to acquire the intervening lands, legislation is being sought to add this tract to the park.

#### RELATED PROPOSALS

Other than Hawaii Volcanoes National Park and lands leased to the military, there are no major Federal parcels on the Island of Hawaii and thus no other wilderness proposals. Large undeveloped sections of private and state land do exist to the north and west around Mauna Loa, Hualalai, Mauna Kea, and in Kohala at the extreme north end of the island. These are almost entirely high-elevation lands either barren or sparsely vegetated, except for the heavily forested windward sections of the Kohala Mountains and the adjacent coastline.

There are two other proposed wilderness areas in the State. One in Haleakala National Park on Maui and one that includes most of the Hawaiian Islands National Wildlife Refuge, between Niihau and the Island of Midway to the northwest.

Kapapala State Forest Reserve, just makai (seaward) from Unit 1, is privately owned land currently used for grazing purposes. Most of the acreage is sparsely timbered. No changes in land use are anticipated for this area.

The Mauna Loa Game and Forest Reserve, just north of Unit 1, is almost entirely barren lava fields with some sparse vegetation at lower elevations. There is little or no use on land adjacent to the park, because of high elevation, cold weather, barren land, and difficult access. Hunting activities take place farther north and at lower elevations. No change is proposed in the use of this land.

Hawaii has zoned all land in the State into four districts--urban, rural, agricultural, and conservation. All of the existing park land is zoned conservation as is most land surrounding the park. The exceptions are Kapapala Forest Reserve, zoned agricultural and small parcels of urban districts east of the Kilauea section of the park and adjacent to the Kalapana entrance. No major change in this zoning pattern is anticipated.

The Mauna Loa Observatory is a complex of research installations located on approximately four acres of State land lying outside the park on the north slopes of Mauna Loa at the 11,150-foot elevation. Operations include solar and space studies, weather research, monitoring devices for detection of atomic explosions, collection of air samples to monitor changes in the earth's atmosphere, and other similar types of research. This is an especially good location for such an installation because of the cloud-free conditions, absence of vegetation and insects, and the general purity of the air. It is expected that this research will continue at the same location, even though the area may be included in the expansion of the park. This subject will be discussed as part of the park master plan and its environmental impact statement.

The County of Hawaii is in the process of constructing a water system to serve the community of Kalapana. Included in the contract is an extension into the park along the Chain of Craters Road to serve the Kalapana Visitor Center.

The State of Hawaii is engaged in upgrading State Route 11, which passes through the park in the Kilauea vicinity. The specific road standards are not known at this time but any improvement within the park would have some effect on the environment.

## DESCRIPTION OF THE ENVIRONMENT

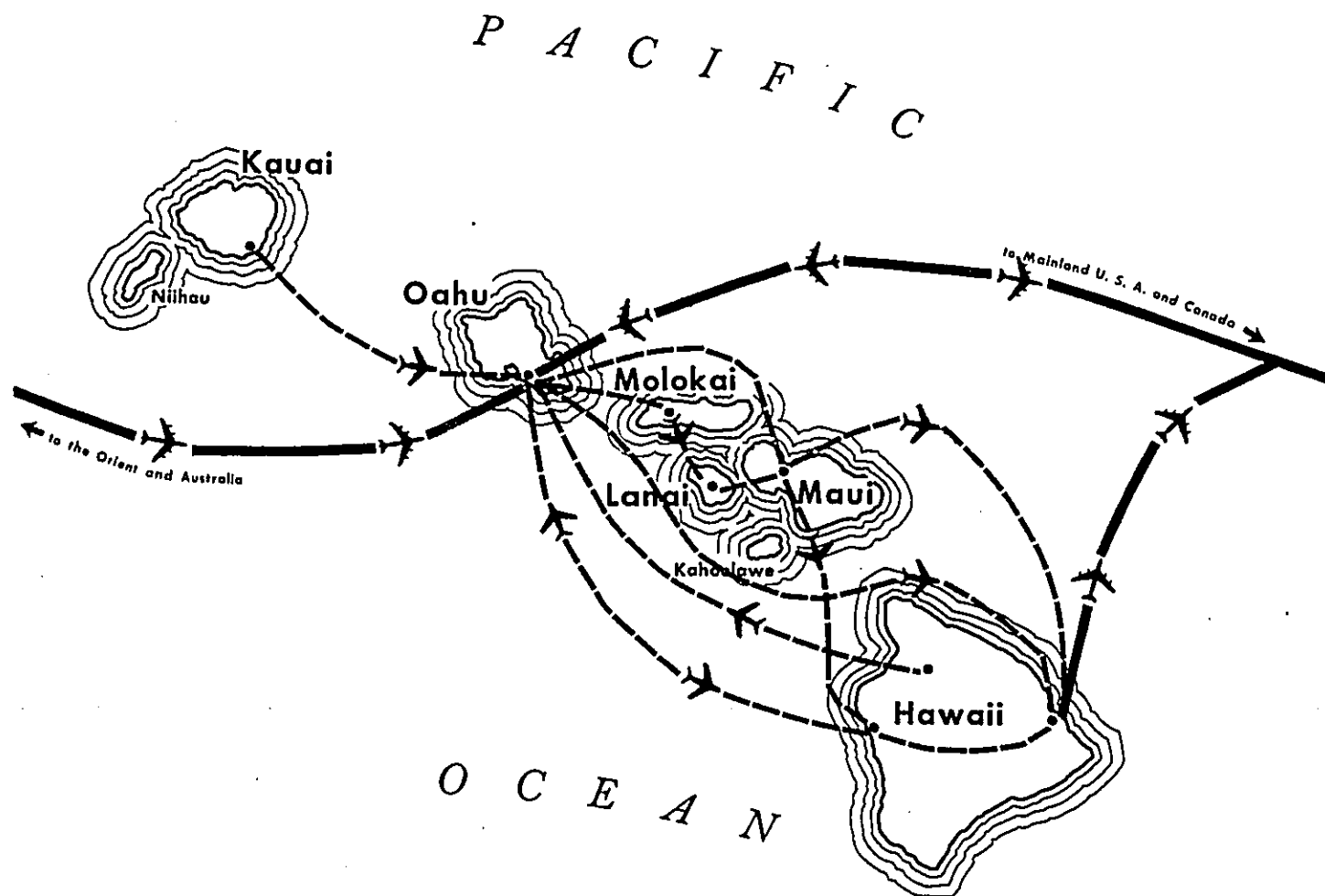
### THE REGION

The Island of Hawaii is a varied land of seasonally snowcapped mountains, active volcanoes, broad expanses of sugarcane, large cattle ranches, dense tropical rain forests, and rough lava coastline dotted infrequently by small beaches. This is the largest of all the islands in the 2,000-mile-long Hawaiian chain and is locally called the Big Island. Indeed, its land area (4,021 square miles) is larger than all the other islands combined. Further, it is a growing island that even now is being increased by lava flows from Kilauea and Mauna Loa, among the world's most active volcanoes.

Principal access to the State and between islands is by air. Jetliners arriving from North America, Australia and many points in the Orient make Honolulu one of the world's busiest airports. And in 1967, direct air service between the mainland and Hilo, the Big Island's main population center, was begun.

Inter-island airlines make about 30 scheduled flights daily to the Big Island terminals of Hilo, Waimea, and Kona. Visitors or businessmen with limited time may arrive and leave the same day--from a different airport if they desire. The Big Island is also included on one-day air tours originating in Honolulu which permit short stops and provide excellent aerial coverage with in-flight informational talks. By contrast, sea travel is negligible with regard to passenger travel and now only carries freight. Intra-island circulation, noted on the map on page 13, is by ground and air transportation centered mainly around Hilo, Waimea, and Kona. Cars and pickup campers may be rented. Commercial tours are available by bus and tour car, and air taxis serve both major airports and minor airstrips.

The State of Hawaii ranks 15th among the 50 states in population density (approximately 100 persons per square mile), but the Island of Hawaii is still sparsely populated with only 15 persons per square mile. Moreover, even though the State's population has steadily increased, (500,000 in 1950; 631,000 in 1960; and 770,000 in 1968), this has taken place almost entirely on heavily urbanized Oahu. By contrast, Hawaii's population has, until recently, been decreasing because of agricultural mechanization and the loss of some industries such as pineapple production. The 1950 population of 68,350 decreased to 61,332 in 1960. It appears, however, that this decline is over and a growth period is forecast, probably due to the rapidly expanding tourist industry. Population in 1968 was 63,500, and the forecast is for about 69,500 by 1980. The major population concentration is in the

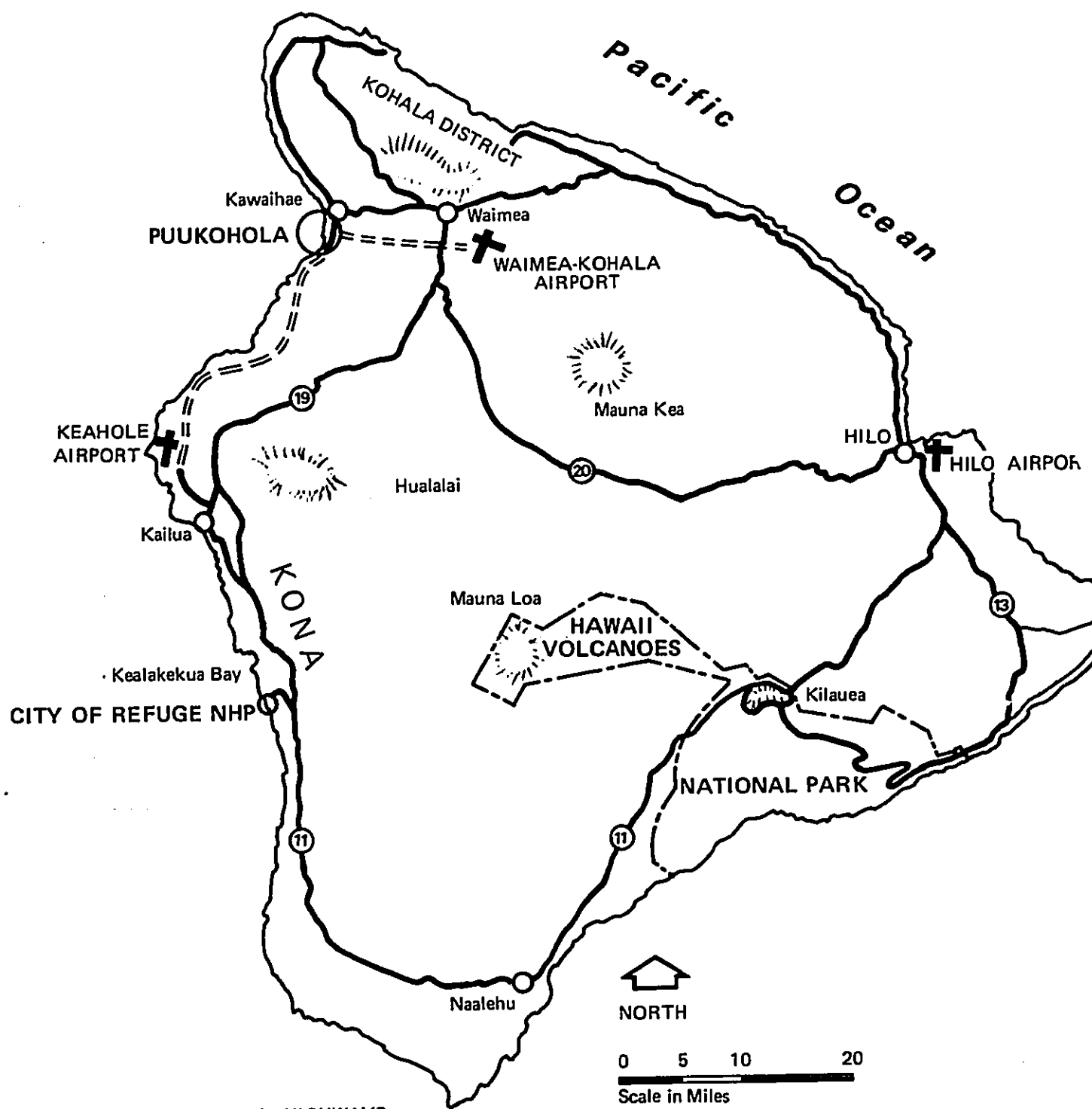


OVERSEAS AIRLINES  
INTER-ISLAND AIRLINES



ACCESS

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SCALE IN MILES



# Island of Hawaii

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Hilo vicinity, which contains about half the island's total residents. The districts of North and South Kona are a secondary concentration with the remainder in small towns and farming areas.

Land-use patterns are closely related to the island environment which varies widely in type and desirability. The gently sloping topography is dictated by the innumerable lava flows that have erupted from the five volcanoes which created the island. The exception to this land-form is the Kohala Coast where erosion and wave action have formed deep valleys and steep coastal palis reminiscent of the older islands to the northwest.

Climate is largely the product of the prevailing trade winds, high mountain masses, and elevation. The annual temperature averages a balmy 75 degree Fahrenheit at sea level, but freezing winter weather is to be expected on the snowy summits of Mauna Loa and Mauna Kea where elevations exceed 13,000 feet above sea level. Trade winds are intercepted on Hawaii's northeastern slopes dropping 200 to 300 inches of rain per year and providing an ideal environment for humid rain forests and commercial sugarcane fields. By contrast, the southern Kohala Coast receives as little as 15 inches of rain a year and presents a desert appearance with cactus-dotted rangeland. The Kona area, also protected from the trade winds, is characterized by sunny mornings with cloudy and rainy afternoons. Most of the afternoon rains fall on higher slopes, leaving the shore areas pleasant.

Sugar production continues to be the island's chief agricultural industry. Other sources of the local economy include grazing and diversified agriculture. The only coffee industry in the United States and the world's largest commercial orchid-growing center are located here. Production for local use and export of papayas, macadamia nuts, and tropical flowers is rapidly expanding. Still, large areas on the island are in undeveloped forests and barren lava fields, much of the latter being at higher elevations around the upper slopes of Mauna Loa and Mauna Kea.

Under the State's "Greenbelt" Law, all land in Hawaii is classified into four major land-use districts--urban, rural, agricultural, and conservation--as determined by the State Land-Use Commission. This law provides some assurance that land will be used for its best purpose and that development will be compatible with the uses permitted within the four categories. The counties regulate internal zoning in the urban, agricultural, and rural districts; the State Department of Land and Natural Resources regulates use in the conservation districts. Outdoor recreation and the preservation of natural resources and cultural values are considered in administering the State Land-Use Law.

The law states that, "Conservation districts shall include areas necessary for protecting watershed and water resources; preserving scenic areas; providing park lands, wilderness and beach reserves; conserving endemic plants, fish, and wildlife; preventing floods and soil erosion; forestry and other related activities; and other permitted uses not detrimental to a multiple use conservation concept."

The last decade has seen the tourist industry and associated recreation uses emerge and become a major factor in the island's land use, and the abundant recreational opportunities are still largely undeveloped. Its 266 miles of coastline, varied topography--much of it barren lava--extending from the sea to nearly 14,000 feet above sea level, and vast areas of wild lands comprise a raw resource adaptable for swimming, surfing, fishing, boating, hiking, horseback riding, hunting, camping, and picnicking. Coastal-oriented recreation holds the greatest appeal for visitors, but island residents are interested also in other activities. Some even seek Mauna Kea's snowy summit for skiing. Paradoxically, there are few swimming beaches and most of these are on the west coast between Kawaihae and Kailua. But sand is not essential for swimming, and rocky coves and bays offer excellent possibilities for snorkeling and scuba diving. The Big Island is also rich in historic sites involving the periods before and after contact with European civilization.

A complex of significant resources on Hawaii are now managed by the National Park Service. The two primary attractions are Kilauea Volcano, a natural phenomenon, and City of Refuge--a window into portions of prehistoric Hawaii. Puukohola Heiau, associated with King Kamehameha's rise to power in the late 18th century, was authorized as a new unit in the National Park System in the summer of 1972. Many other historical, archeological, scenic, and recreation resources on the island are dedicated to public use by the State and county park systems, while others are being developed by the expanding tourist industry.

#### THE PARK

Hawaii Volcanoes National Park contains all the land now proposed for wilderness by the Federal Government on the Island of Hawaii. The park occupies the summit and part of the southeast flank of Mauna Loa Volcano and almost a third of Kilauea Volcano. These broad, flat volcanic domes rarely explode, but erupt generally from calderas (huge collapsed depressions in the summit) or along the rift zones on the flanks of the volcanoes, after sending up fountains of molten lava hundreds of feet into the air. Huge volumes of lava also emerge from major vents to completely destroy plant communities and manmade developments. They create new topographic formations and flow into the ocean, sometimes actually adding new land to the island.

### Geology

Kilauea Volcano's two main rift zones are defined by large pit craters, cracks, and cinder zones. The east rift and Chain of Craters has been particularly active in recent years. Kilauea's seaward side exhibits great fault scarps contrasting with its other gentler slopes. Lava flows, devastated areas, and steam cracks show old and new activity, and steam issues from the ground at many places in and around the Kilauea Caldera and along the Chain of Craters. Sections of the Chain of Craters and the east rift zone are in proposed wilderness Unit 3 and about half of the southwest rift zone is in Unit 2. Kilauea Caldera and the upper portions of both rift zones are excluded.

Mauna Loa is a massive, flat-domed shield volcano built by layer upon layer of lava flows and is recognized as the best example of its type in the world. Extending from about 20,000 feet below sea level to 13,680 feet above, it is one of the world's greatest mountains. Its upper slopes, along its two principal rift zones, contain extensive recent flows of various colors and types. These flows are stark, colorful, bare, and forbidding. Mauna Loa has been intermittently active, with periods of quiet ranging from a few months to more than a decade. Many of its eruptions are confined within the caldera of Mokuaweoweo. Others start there, gush from cracks in the flanks far below the summit, and rush many miles to the sea. All of the upper slopes of Mauna Loa within the existing park boundary are in proposed wilderness Unit 1. Most of the rift zones are not included in the current park boundary, but portions of them are proposed for addition in the master plan.


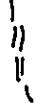






Kilauea is one of the most studied and best understood volcanoes in the world. Moreover, it is relatively safe and easily accessible both for visitors and researchers. The program of research is centered at the Hawaii Volcanoes Observatory on the rim of Kilauea Caldera, and is under the direction of U.S. Geological Survey scientists. This favorable opportunity for both research and sightseeing is not duplicated or even approached in any other part of the world.

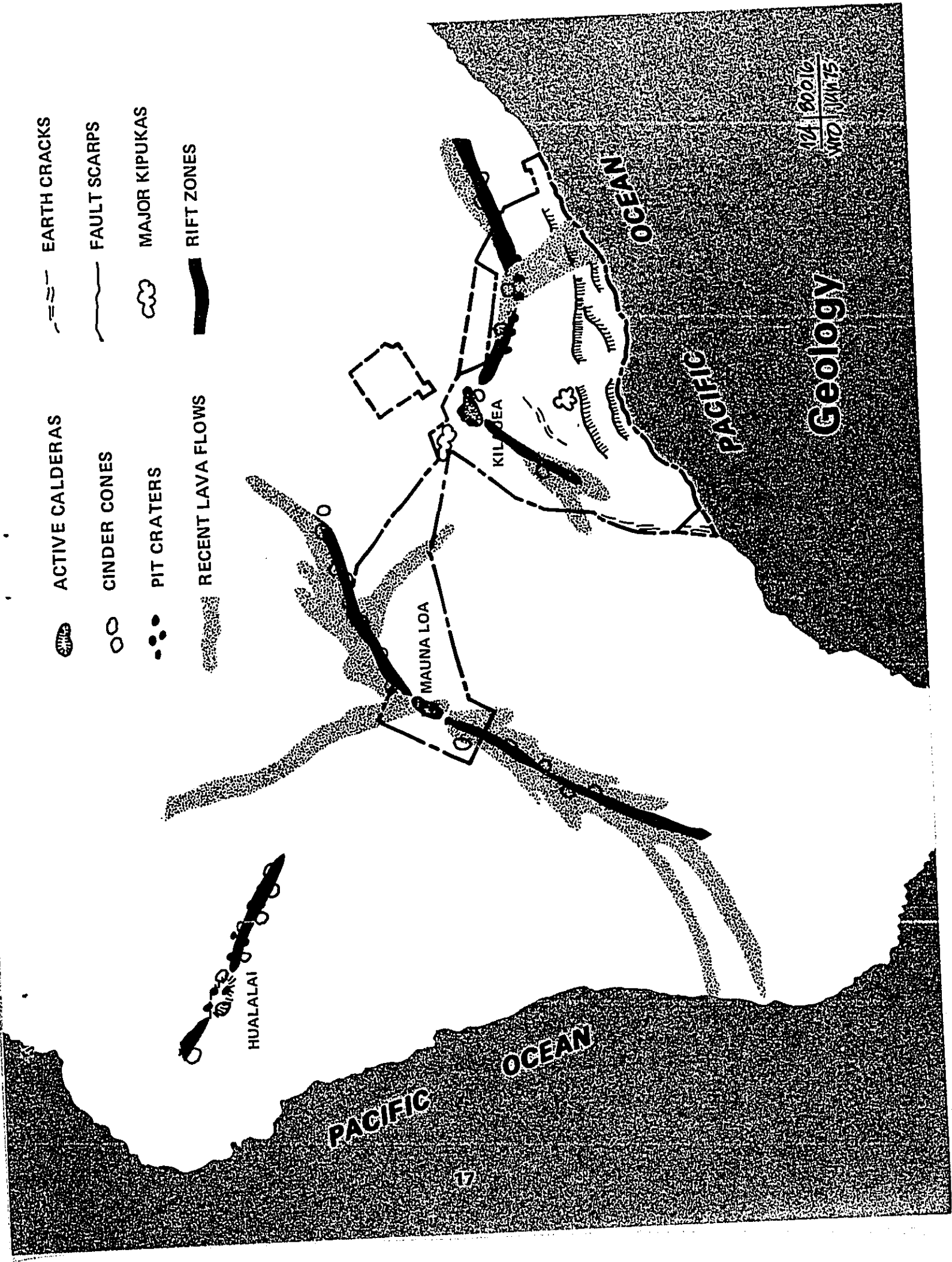
The volcanoes observatory and the most intensive concentration of research installations in the upper Kau Desert are excluded from wilderness Unit 2. But there are other scattered installations throughout Units 1, 2, and 3. Existing installations are noted on the map on page 5 of this report.

### Vegetation

Hawaiian flora is quite young in relation to continental vegetation. Its communities possess numerous niches which were never filled by



- |   |                   |   |               |
|---|-------------------|---|---------------|
|  | ACTIVE CALDERAS   |  | EARTH CRACKS  |
|  | CINDER CONES      |  | FAULT SCARPS  |
|  | PIT CRATERS       |  | MAJOR KIPUKAS |
|  | RECENT LAVA FLOWS |  | RIFT ZONES    |



native forms, leading to the belief that the endemics evolved with little competition. This made the Hawaiian vegetation units more vulnerable to structural and composition change when highly competitive species were introduced.

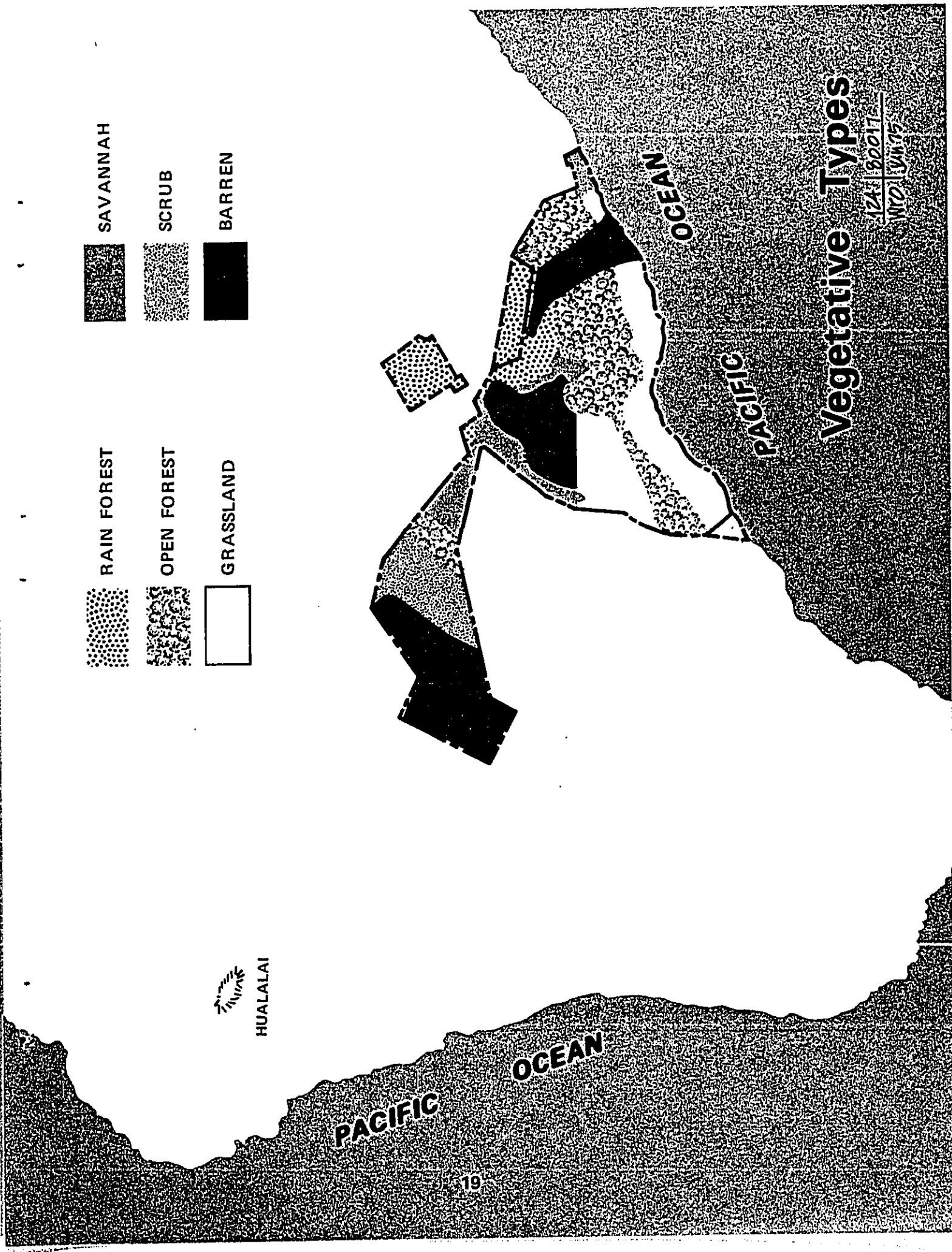
With an elevation range from sea level to 13,680 feet and a precipitation spread of 15 to 100 inches of rain annually, there is within the park a wide variety of vegetative types--from lush, rain forest jungle to the sparse vegetation of the Kau Desert, a few miles to the southwest, and to the great expanse of barren lava on the upper slopes of Mauna Loa. Topographic vegetation profiles indicate 23 distinct types present. The six major types are shown on the map on page 19.

Wilderness Unit 1 is mainly in the upper elevations containing barren lava, except for the lower end where there is a fine Koa forest. Unit 2 varies from the dry Kau Desert and Coast to open forests and grassland. Unit 3 contains some recent lava flows plus humid ohia and fern forests.

Some native species are endemic only to a single valley or mountain slope. And some are found in kipukas, older areas that have been surrounded by more recent lava flows. They can be readily recognized as islands of denser vegetation in sparsely vegetated areas. Kipukas represent somewhat simplified ecosystems, analagous to bogs or lakes and this isolation of small populations provides opportunities for evolutionary study. None of the major kipukas in the park are included in wilderness except a portion of kipuka nene, which is in Unit 2. Some smaller kipukas do, however, occur in all wilderness units.

During the Polynesian colonization period, several nonnative plants were released into the native vegetation, and some of these became securely established. The appearance of western man, near the close of the 18th century, marks the period of mass introduction of highly competitive and aggressive species (guava, tibouchina, lantana, and kiae), and the direct removal or alteration of the native forest for sugarcane, pineapple, and ranching activities. Sections of the Mauna Loa Strip have been most obviously affected by domestic stock. This activity was stopped and the vegetation is recovering. Nevertheless, some exotic plants, particularly grasses, have invaded most of the disturbed areas and ecological niches within the park. Major disturbances occur in the lower elevations of wilderness Unit 1 and in Units 2 and 3.

Fortunately, significant large areas of original vegetation still remain intact. Perhaps the most important is the Olaa Forest Tract, an area of nearly 10,000 acres, and probably the largest remaining tract of virgin ohia and fern forest in the Hawaiian Islands.



SAVANNAH

SCRUB

BARREN

RAIN FOREST

OPEN FOREST

GRASSLAND

Vegetative Types

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HUALALAI

This tract has been recognized by the Society of American Foresters as a "natural area," the best example of this type. Nearly all of this tract is proposed as wilderness Unit 4.

Rare native plants are being replanted in an effort to keep them from extinction, including one of the world's rarest trees, the "hua Kuahiwi," or Hibiscadelphus giffardianus. Naulu forest containing many species of rare native plants clustered in a small area was only very recently destroyed by a lava flow.

#### Animal Life

Birds are the most important aspect of the park's animal life. There are 10 species of endemic birds, 6 migrant or sea birds, and 15 exotic species. Several endemic species of birds and insects have become extinct within the park and elsewhere on the Island of Hawaii because of many practices which disturb native habitats and introduce competitive animals. Introduced birds are especially detrimental to the highly specialized Hawaiian honeycreeper family (Drepaniidae). Included in this group are the commonly seen apapane and iiwi, several species that are rarely seen and the ou and akiapolaau which are on the endangered species list. Other endemic birds which range throughout the park are pueo (owl), amao (thrush), and the elepaio (flycatcher). Io (hawk) and nene (goose) are found within the park in limited numbers, being two other species listed as endangered.

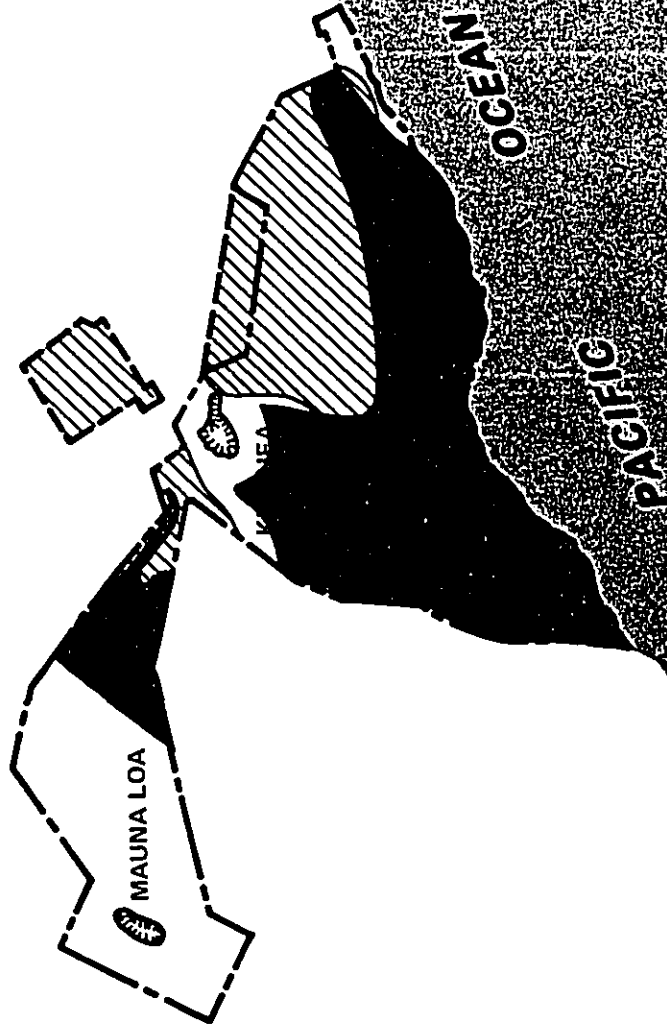
Native migrant sea birds include the dark-rumped petrel, white-tailed tropic-bird, the American golden plover, the ruddy turnstone, wandering tattler, and the white-capped noddy. The exotic species include the California quail, chukar, ring-necked pheasant, Japanese blue pheasant, spotted dove, barred dove, skylark, Chinese thrush, red-billed leiothrix, mynah, white-eye, ricebird, house sparrow, cardinal, and house finch. The Hawaiian bat is the only native land mammal.

Both native and nonnative birds occur generally throughout the park's lower elevations both within proposed wilderness units and on non-wilderness land. Greater protection, however, is afforded native species on wild lands than on those containing development.

Feral goats and pigs have built up high populations in some sections of the park despite long-term reduction efforts. Recent feral goat populations are in the 10,000 to 15,000 range. They inhabit the open, drier coastal and mountain sections of the park; generally throughout proposed wilderness Unit 2 and in the lower elevations of Unit 1.

FERAL GOAT RANGE

FERAL PIG RANGE



HUALALAI

PACIFIC

OCEAN

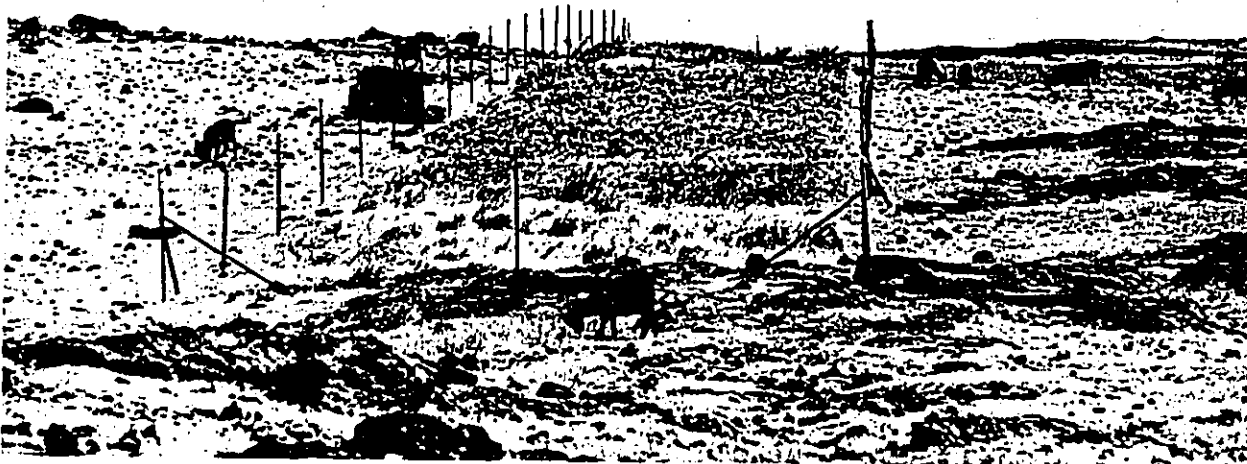
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Fence surrounding Bird Park. This is the character of the goat control fences proposed in the master plan.

Kukalauula goat enclosure 2 years after construction showing revegetation. Plants include both native and exotic.



The pig was brought to the Hawaiian Islands by the Polynesians during their early migrations. The Polynesian strains mixed with later European varieties, producing the present-day pig that inhabits the dense rain forests of the park. Pigs can be found within all four proposed units. The resource damage these animals inflict is not completely known, but they do encourage introduction of exotic plant species by rooting in the native plant cover.

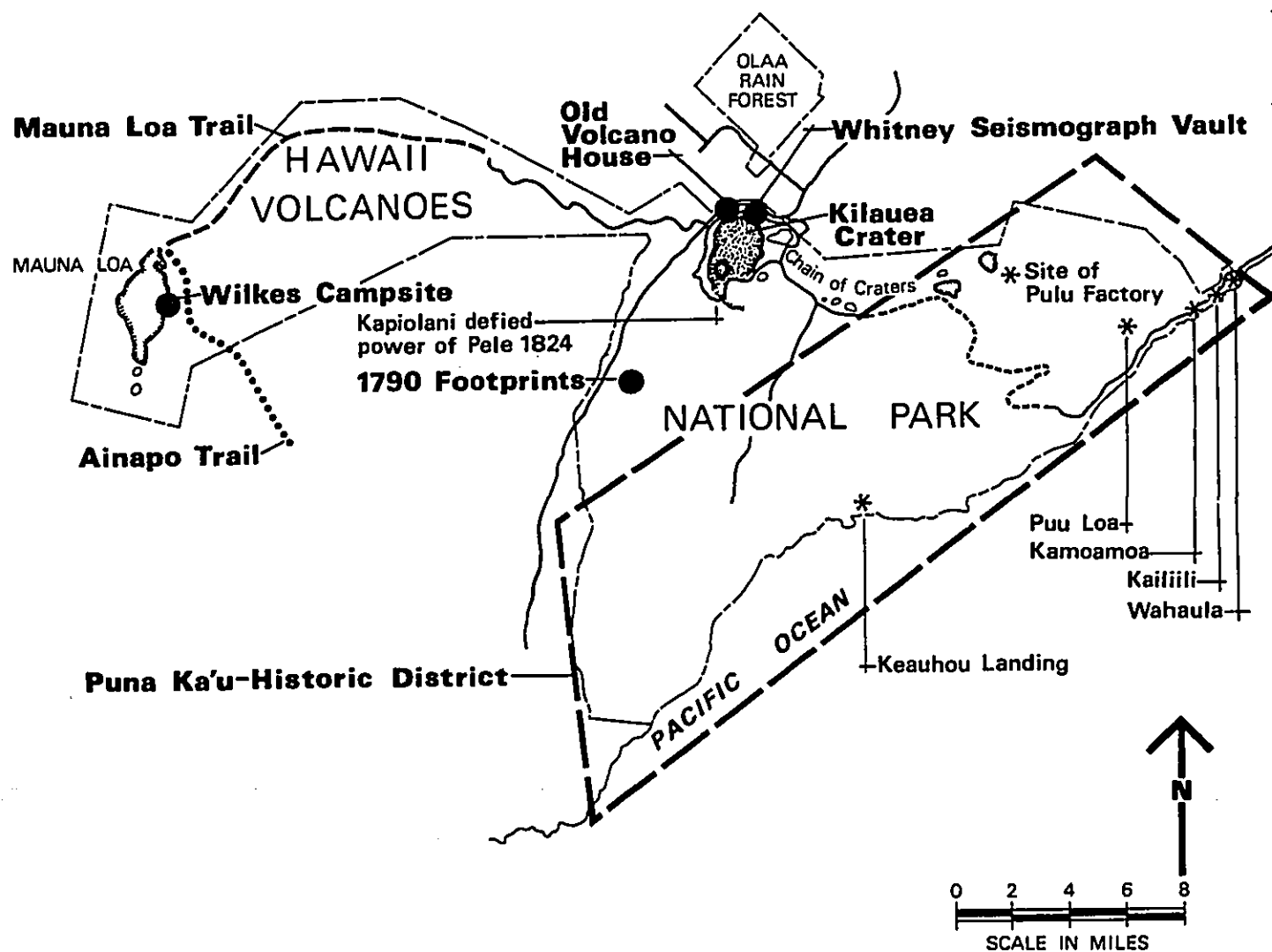
To restore and maintain native vegetation, feral animal control is necessary. Control measures, mostly for goats, are particularly important in the lower elevations from the palis to the coast. Control is accomplished by drives, roundups, and direct shooting by special deputized citizens or park personnel. Drift and enclosure fences have been constructed in the lower Mauna Loa Strip and along the Kau Coast. They divide portions of the park into 2,000- to 5,000-acre units and thus assist in more adequately reducing and controlling the goat population. More such fences are planned as shown on page 4 of this statement. In fact, 40 miles of fences will be built and maintained in proposed wilderness Units 1 and 2. Although four-wheel-drive vehicles will no longer be used in these areas, it will be necessary to continue using portable electric drills and other tools for fence construction. Moreover, these and the men who use them will need to be transported into wilderness areas by helicopter.

There are no fish within the park, or within any of the proposed wilderness units. However, colorful fishes are found along the park's 30-mile coastline where there are excellent opportunities to view and study them. Coral reef formations are found only in one small section, less than 1/4 mile of remote coast near Halape, and are not accessible by road. Common reef fishes include the squirrel fish, butterfly fish, Moorish idol, surgeonfish, trigger fish, and several kinds of eel. Opihi, a shellfish found on the surf-washed lava cliffs, is an important local delicacy.

#### History and Archeology

Land within the national park, especially the coastal region, is rich in remains left by the ancient Hawaiians--heiau ruins, house platforms, stone walls of canoe sheds, pens and corrals, graves, shelter caves, petroglyphs, paved trails, and agricultural areas. Many are within easy reach of the former Kalapana / Chain of Craters Road. Others are scattered along that section of coast accessible only by trail and to a lesser extent inland, but almost entirely within proposed wilderness Unit 2 or along the coast within the Kalapana Extension.

The people who lived here were mainly fishermen and farmers, and in the uplands some were bird hunters. Habitation required special



## History and Archeology

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adaptation to severe environmental conditions and reveals the versatility and ingenuity of the Hawaiians. Archeological surveys were undertaken in 1959 when the Bishop Museum, under the direction of Dr. Kenneth P. Emory, made the first extensive field survey. A second survey was made between 1963 and 1965, which continued the assessment of the park's archeological resources and suggested avenues along which more detailed investigations might proceed. These surveys recorded 380 sites. Between 1962 and 1968, several small sites were salvaged as part of the Chain of Craters Road project.

There are within the park a variety of archeological resources, unique in several ways. Furthermore, there is evidence that many aspects of Hawaiian history can best be investigated in this particular complex of sites. Several deserving of special mention are discussed below.

Wahaula Heiau--Red Mouth Temple--is reported to have been established and constructed in 1275. Kailiili village, nearby, probably supported the temple. These are the most important archeological sites in the park. The heiau is one of the most significant in the Hawaiian Islands, as it is important in the story of Paoa and the introduction of the heiau luakini and the ritual worship of the major gods that characterized Hawaiian ceremonial worship. It is in remarkably fine condition and has an impressive appearance.

Site 911 is a small cave shelter west of Kailiili village near the coast which was used by the ancient Hawaiians as a shelter and an occasional overnight campsite.

Kamoamoa Village site represents an area where two periods of occupation appear to be superimposed. The ancient village appears to be farther back from the shore and the later (historic) development toward the ocean.

The Puu Loa petroglyph field, about 1/2 acre in extent, is the largest concentration of "rock carvings" in the park. It is one of the three largest in the Hawaiian Islands. Many of the petroglyphs are ancient, as they have been almost completely obliterated by successive drawings and erosion. The forms are mainly dots with rings, human figures, sails, and circles with attached lines.

Kealakomo was perhaps the largest village on the Puna Coast in ancient times. It was also the hub of a number of trails: coastal and inland, ancient and post European. Unfortunately this site was covered by fresh lava in 1972.

The aforementioned and numerous additional sites are a rich source of research material dealing with ancient Polynesian culture and the

transition to modern times. Many scattered sites are located along the coast within the proposed wilderness Unit 2. Occasional sites also exist in other units.

Captain James Cook, R.N., discovered Hawaii for the Western World in 1778 and died at Kealahou Bay in 1779. His ship navigated offshore from what is now Hawaii Volcanoes National Park, trading with the Hawaiians of Puna and Kau, exchanging nails, beads, and cloth for pigs, fruit, and salt.

The historic events that occurred within the park area after Captain Cook first viewed the Puna/Kau coast are of value chiefly in their association with events that occurred elsewhere, and in the descriptions of the volcano and the coastal Hawaiian habitation recorded in accounts of early travelers. An explosive eruption of Kilauea was a historic factor in the eventual rise of Kamehameha as ruler of all Hawaii. In 1790, while enroute through the Kau Desert to battle the forces of Kamehameha, a portion of Keoua's army was destroyed by the volcano. Fossil footprints of some of the Hawaiian warriors remain today in the Kau Desert. This footprints area is near the northwestern boundary of proposed wilderness Unit 2. Vancouver's naturalist, Archibald Menzies, was the first Westerner to penetrate inland to what is now the park. He ascended Mauna Loa in the winter of 1794, a climb not duplicated until Lt. Charles Wilkes, U.S.N. and aides made the climb again in 1841.

In 1823, a band of Christian missionaries visited Kilauea and wrote such vivid and widely read descriptions that thereafter Kilauea was of prime scientific interest as well as a desired visitor destination. By the 1840's, before Yosemite Valley had even been discovered, Kilauea Volcano had become a regular stop for tourists to Hawaii. They stayed in native-style huts until 1866, when the Volcano House was established on the caldera rim.

The records of Menzies and the Rev. William Ellis in 1823, and the officers of HMS Blonde in 1824 started a long list of amateur and professional observations of Hawaii's volcanoes, which formed the basis of volcanic study which was formalized in 1912 with the founding of the Hawaiian Volcano Observatory.

Hawaiians held the Kilauea summit sacred, and made offerings to the Goddess of Volcanoes--Pele; and it was at Halemauau, the principal vent of Kilauea, that the image of Pele was weakened in 1824 by High Chieftess Kapiolani, a convert to Christianity, who ate ohelo berries without the traditional offering. Her action did much to weaken belief in the old gods and paved the way for a wider acceptance of Christianity.

Christian missionaries based in Hilo built churches and schools in the mid-1800's along what is now the park's seacoast. Cattle, goat, pulu (a fern product), and tourist enterprises changed the Hawaiian way of life as well as the structures of the villages. The now abandoned villages represent Western influences grafted onto the traditional Hawaiian culture. Only tourist activity and scientific investigation on Kilauea's rim have survived.

Two relatively recent historic sites have been identified. One is the "Old Volcano House" of 1877, which still stands. The second is the Keauhou Landing Site which for a time in the middle 1800's was a landing for tourists coming to the Kilauea volcano. The landing and village were virtually destroyed by the 1868 tsunami (tidal wave) that destroyed whole villages along the Puna/Kau Coast. A few coconut trees and remains of the old wharf are all that is left of what was once a fairly large village and steamship port.

A third historic site of some significance, a pulu factory ruin, is located on the trail between Makaopuhi and Napau Craters within proposed wilderness Unit 3.

Several properties within Hawaii Volcanoes National Park are now on the National Register of Historic Places: the Wilkes Campsite and the old Ainapo Trail, in proposed wilderness Unit 1; the Kau portion, the Puna/Kau Historic District, a portion of which lies within proposed wilderness Unit 2; the footprints area, along the edge of proposed wilderness Unit 2; plus Kilauea Crater, Whitney Seismograph Vault, and the Old Volcano House, all lying outside the proposed wilderness areas. The Mauna Loa Trail, nominated and declared eligible for the National Register lies in proposed wilderness Unit 1. These sites are noted on the map on page 24. The Puna/Kau Historic District includes previously described Wahaula Heiau, Kailili Village, Site 911, Kamoamoa Village, Puu Loa petroglyph field, Kealakomo, pulu factory ruins, and Keauhou Landing Site.

#### THE VISITOR

Park use at Hawaii Volcanoes is year-round and 90% day use. There are very heavy use days during periods of eruption activity but these periodic increases have little or no effect on use of the park's backcountry. Visitation averages about 70,000 a month during the off-season from September to May and about 100,000 a month during the summer. There may be as many as 20,000 visitors a day in the park. Particularly important at Hawaii Volcanoes, however, is the origin of the visitor, and his socioeconomic status. This manifests itself in how the park resources are used, access to the park, and particularly, the approach to and interest in the park's backcountry.

Concerning their origin, visitors come from three basic sources: off island visitors (including mainland and foreign), about 50%; local island residents, about 35%; and Kilauea Military Camp (a recreation facility for military personnel within the park boundary), about 15%.

By far, the majority of off-island visitors see the park in organized tours. Kilauea is a major stop on the Hilo-Kona (and reverse) tours. Seven companies serve the park, using 11-passenger limousines and larger conventional buses. They carried almost 400,000 visitors through the park in 1972. In the summer, 1,200 to 1,500 persons tour the park each day with the "off-season" average about 800 to 1,000. These tours are usually in the park between mid-morning and mid-afternoon and almost all make a lunch stop at the Volcano House. Their visit is very structured. It generally involves a brief tour around Kilauea Caldera, a stop at the visitor center for information and interpretation, lunch at the Volcano House, and back to the bus to continue the trip to Hilo or Kona. These visitors are little problem to the park manager, have little impact on the major resources, and no measurable effect on the backcountry.

The balance of off-island visitors see the park in rental cars. There are about 500 such cars available on the island, and of these, about 75% are driven to the park.

Local island residents make up a large portion of eruption viewers. They also come to picnic, sightsee, hike, and, to a limited extent, to camp and fish. The farthest islander resides within a  $2\frac{1}{2}$ -hour drive of the park and more than half the 62,000 residents live within an hour's drive. Their use is almost entirely during the day. The significant fact concerning these visitors is the difference in their attitude about the park. This is a multiracial group consisting of Japanese, Chinese, Filipino, Portugese, Hawaiian, and Caucasian. Traditionally the Hawaiian culture was closely allied to the sea and nearly all activities reflected this alliance. And this has greatly influenced lifestyles today. Moreover, because it is their home, island residents regard the park land differently from off-island visitors. Many of the leisure time activities involve use of the seacoast for food gathering as well as for strictly recreational pursuits. There are signs of a change, however, and as the economic level rises there appears to be more interest in special recreation activities.

These local residents and the off-island visitors who arrive in rental cars represent almost all the potential backcountry users who may wish to fish, hike or ride in coastal and upland areas or even make the arduous climb to the summit of Mauna Loa. This type of use, too, is increasing. In the 1960's, only about 1,000 to 1,200 persons stayed overnight in the backcountry. In 1972, the number was about 2,500.

This increase has occurred despite rough terrain and lack of fresh water. Most use is along the coast below Hilina Pali where there is access to good fishing at areas such as Halape, Apua Point and Kakiwai. There is also some use of the trail to Mauna Loa's summit where two cabins provide minimum shelter in this cold climate. The master plan proposes to relocate two other shelters in this summit region for a total of four. In the coastal area it is also proposed to build three additional shelters as noted in the proposal section of this statement.

Visitors to the Kilauea Military Camp on the rim of Kilauea Caldera are often families who tend to remain in and around the major developed areas. This facility does, however, receive the greatest overnight use. The camp provides a complete, week-long vacation program for active and retired members of the Armed Forces and their families, and can accommodate 300 persons. It operates at capacity during the summer season and at about 55% capacity off-season.

For other visitors a choice of overnight facilities is available. The Volcano House on the rim of Kilauea Caldera, has been in operation since 1866. The present structure is a 125-guest-capacity lodge located directly on the Kilauea caldera rim. It operates at more than 75% capacity year-round. Namakani Paio is a 10-unit cabin facility operated by the Volcano House. It was constructed by the National Park Service in 1965 to provide low-cost overnight accommodations. Each unit sleeps four and has an outside picnic table, grill, and lights. There is a central washroom with hot showers. Visitors can bring their own bedding and cooking utensils or rent them from the concessioner.

Campgrounds are also available--three separate units with a total of 22 sites, located near Kilauea Caldera at about 4,000 feet elevation, on the Kalapana Coast near the park entrance and near the edge of Hilipina Pali. None are within the proposed wilderness units. Use had until recently been relatively light; 1,179 camper days in 1967. The major reason for this light use appears to be the cooler, wet weather at Kilauea's 4,000-foot elevation and the fact that traditional camping use in Hawaii is closely tied to the coast and fishing. The coastal area, however, lacks good potential for uses such as swimming, boating, and fishing. Even so, camping use is on the increase as the island becomes more urbanized and visitors find facilities outside the park more crowded. In 1972, there were 2,500 total camper days.

#### ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION

Hawaii Volcanoes wilderness proposal anticipates reserving about 62% of the park's acreage in an undeveloped state. This action will have considerable impact on all aspects of the park's environment as well as on the manner in which man uses and manages the land. This impact will manifest itself in specific social, biological, and economic effects which will involve both the park and the Island of Hawaii.

These effects fall generally into six categories--impact on research programs (especially those conducted by U.S. Geological Survey), on park management and operation, on the economy of the region, on park use by the bulk of off-island visitors, on use by Big Island residents, and on the survival of specific communities of endemic plants and animals.

#### IMPACT ON RESEARCH PROGRAMS

Perhaps the most significant program is that conducted by the U.S. Geological Survey, and one that predates establishment of the national park. Research facilities are placed in strategic locations throughout the park, as noted on the map, page 5, of this statement, and are part of the complex monitoring system that assists the extensive program of volcanic research. This involves not only the active vents and their immediate vicinity, but many additional locations within the area proposed for wilderness. This research program will not be curtailed by wilderness designation, but specific controls will be necessary. No ground vehicular access will be allowed, even in the case of new eruptions. The continuing research structures will be inconspicuous, and the more conspicuous instrumentation, used during eruptions, will be removed after the eruption ceases. None of these programs would have any impact on volcanism. They will have a limited physical impact on the land as the installations will be visible from nearby. Disturbance of the land itself for the installations involves less than 10 square feet for each installation. This is a master plan decision, however, and is discussed in the impact statement on that proposal.

The only exception to restricted vehicular use will be the allowance of four-wheel-drive access, for research only, to the summit of Mauna Loa from the north side. This is described as a proposed special provision on page 3 of this statement. Impact resulting from this provision will be the retention of a minor jeep road scar across 3 to 5 miles of barren lava. It is not visible from any major visitor-use area.

Even with the above-mentioned controls, the research facilities are an intrusion into wilderness. Furthermore, they currently require about 300 trips a year to service and maintain them. Even assuming the use of



TILT STATION, USED BY U.S. GEOLOGICAL SURVEY FOR MEASURING EARTH MOVEMENT RELATED TO VOLCANIC ERUPTIONS. THIS IS TYPICAL OF THOSE LOCATED ON PROPOSED WILDERNESS LANDS. THE INSTRUMENT ITSELF IS BELOW GROUND SURFACE'



ANOTHER TYPE OF FACILITY, A MAGNETOMETER,  
LOCATED ABOVE GROUND. THIS TYPE OF FACILITY  
IS ALSO LOCATED ON LAND PROPOSED FOR WILDERNESS



more sophisticated electronic equipment in the future, many trips will still be required to each site for service or replacement every year by foot, horseback, or helicopter. These will produce adverse impact of noise, additional soil compaction and reduction of wilderness quality by the mere presence of more people, horses, and machines. However, the main concentration of facilities will continue in the upper Kau Desert near Kilauea Caldera on non-wilderness land. Generally, the total impact of wilderness designation on research will be most apparent in the added cost of research (probably about 25%), mainly because of the added problems of access.

Research conducted by the National Park Service is predominantly associated with biological and archeological resources. Many important plant communities and bird species are in danger of being damaged by competing exotics, or possibly, of becoming extinct. Continuing research and monitoring is an important element in protecting these communities. Again, research would not be curtailed by wilderness designation but would be more expensive and time consuming. No vehicular access would be allowed, and no permanent research facilities would be permitted. The amount of additional cost incurred will be dependent on the type and scope of the specific project. It is estimated that about 100 trips a year are now required, mainly into wilderness Units 1 and 2. This pattern would continue but all trips would be on foot or horseback.

In the case of historical and archeological research, the problem is similar but less acute. Many of the known significant archeological sites lie along the coastline within the Kalapana Extension and outside the proposed wilderness. But the remainder of the park's coastline lies within the proposed wilderness boundary of Unit 2. Any research on wild lands is expensive and difficult. Thus, as a result of wilderness designation, there will be some increase in the cost of archeological research, but mainly in the coastal sections of Unit 2 where unexcavated sites still exist. The additional cost resulting from wilderness is not known as specific programs have not been formulated.

#### IMPACT ON PARK MANAGEMENT AND OPERATION

The dominant impact will be in the field of exotic plant and animal control. This is a major concern of management at Hawaii Volcanoes where exotics are a constant threat to native populations.

The most active current control operations involve feral goats. Because of the special provisions proposed for the goat fencing program and use of portable drills in the wilderness, these control operations will continue after wilderness designation. This will include use of helicopters for goat drives and for fence construction and maintenance. (See the discussion of this proposal on page 23 of this statement.)

This involves portions of wilderness Units 1 and 2. The dominant measurable impact will be the increased cost in the program, since motorized vehicles will not be allowed. Other effects will be the audible and visual intrusion caused by the use of helicopters for management and research purposes. It should be emphasized here that the maintenance of native plant and bird populations is almost entirely dependant on control of goat populations. Thus, the importance of the control program, including fences and other means, cannot be over-emphasized. Indeed, it is an environmental issue that transcends wilderness designation. That issue is discussed in greater detail in the master plan and resource management plan impact statements.

As for future feral animal reduction programs, control of exotic plants, and restoration of native species, the precise impact resulting from wilderness designation is almost impossible to determine. This is because adequate methods have yet to be devised to control mongoose, rats, pigs, or even most exotic plants. For example, it is not known what effect the non-mechanized equipment requirement of wilderness will have. It is almost certain, however, that any such program will be more expensive as a result. The same holds true for the restoration of native species. Currently the programs of feral animal control require about 1,500 man-days in the backcountry each year.

An important element in management of visitor use in the wilderness will be the use of primitive backcountry shelters, both the 4 existing shelters and 5 proposed for construction. New shelters will disturb a total of not more than 1 to 3 acres. Their major impact will be visual--formal structures along an undeveloped coastline with sparse plant cover. The concentration of use thus stimulated, however, will result in some danger to native biota and to historical or archeological sites. The exact extent of such damage is unknown, but it will manifest itself in trampling of vegetation and possible "pot-hunting" on historic sites.

#### IMPACT ON ECONOMICS

Designation of this large acreage as wilderness precludes development of campgrounds, picnic areas, or similar recreation facilities. This means that most of the park and its resources are not available for any direct economic investment. However, this must be considered in a regional context. The entire Island of Hawaii is a larger identifiable land mass of which the park is only a part. There are many sites, as yet undeveloped, that are more suitable for intensive use by virtue of better access, superlative recreation resources, and better climate. Retention of this large acreage in open space and as wilderness, along with the steadily increasing pressure for backcountry experience by urban dwellers, will more likely result in a distinct economic advantage by rounding out and expanding the type of leisure time activities available.

#### IMPACT ON USE BY OFF-ISLAND VISITORS

For this group of visitors, mostly part of a tour group, wilderness will have an effect in only two ways. First, the concentration of use in the existing developed areas will continue in the present pattern. The non-development requirement means that no new areas will be opened to direct on-site use by the mainstream of park visitation. Thus, use of the land for on-site visits will be limited to those with the time and energy to be independent of motorized access. This is the pattern proposed in the park's master plan. Second, many of the great expanses of native environment will continue to be available for the tour visitor to view from a distance as he travels the park roads. The summit of Mauna Loa (proposed Unit 1) is visible from most park roads, and from the Hilina Pali Road much of the coastal section of Unit 2 is visible. Small portions of Units 3 and 4 are also visible from or near park roads and developments. That these expansive views will continue to be available is assured under wilderness designation; similar landscape types in Hawaii have no such protection.

The park's prime attractions--Kilauea Caldera, the Chain of Craters, and part of the Kalapana Coastline--will continue to be available to the off-island visitor who is unable or unwilling to walk long distances. Thus, those attractions located within wilderness will tend to be frequented by the more ambitious visitor willing to spend a greater amount of time in the park.

#### IMPACT ON USE BY LOCAL VISITORS

Even for the Big Island resident and for a minority of off-island visitors, extended hiking and fishing trips will require some sophisticated equipment. Moreover, such persons must be physically fit in order to undertake hiking or riding long distances. Permanent overnight camping or lodging facilities other than primitive shelters will not be allowed. The relatively new lavas in the park have no natural fresh water available. Thus, the type of backcountry use associated with mainland mountain wilderness areas is not feasible in this dry coastal area, thereby necessitating the special provision for rain collection structures. These structures will double as shelters and will disturb a total of less than a tenth acre each. They will, however, tend to concentrate use in their vicinity, thereby creating greater human impact on native plants and possibly on nearby historic sites. Use of the major park attractions will not be generally affected and local citizens will continue to view and enjoy the volcano goddess' frequent fireworks around Kilauea and the Chain of Craters. If, however, eruptions take place on land designated as wilderness, the only access would continue to be by trail, and no new areas would be opened to motorized access.

Setting of a carrying capacity for backcountry areas is not part of the wilderness proposal but it does come as an indirect effect of maintaining much of the park in an undeveloped state. This action will eventually mean that some persons may be prohibited from using the park's wilderness lands when they wish.

Fences for control of feral goat populations are noted under the proposal section of this statement as a special provision. These fences will be an esthetic intrusion into the wilderness, particularly for the backcountry user, and visitors may encounter 5 or more during an extended hiking trip. An esthetic impact, in addition to that noted in the previous paragraph will also result from construction of backcountry shelters and rain catchment. Finally, there will be a minor impact on food gathering activities by local residents. This involves fishing from the shore and collecting marine life from intertidal zones. Wilderness will retain land in an undeveloped state, which will require walking or riding by those wishing to obtain food in this manner.

#### IMPACT ON ENDEMIC PLANTS AND ANIMALS

Hawaiian endemic populations like those elsewhere have developed independently of man's activities. Indeed, the greatest danger to most Hawaiian plants and animals has in the past been the result of man's agricultural practices; his introduction of goats, pigs and exotic birds; and even the simple act of walking into fragile ecosystems with exotic plant seed adhering to his clothing. The very fact that human use of wilderness land will be stringently controlled will have the impact of assisting in protection of particularly sensitive species.

Native birds are particularly sensitive to human intrusion as are many of the native plants they feed on. The Olaa fern forest exhibits a total ecosystem with little invasion of exotics, but it is a resource that would change drastically if the land were developed and plant cover disturbed. National Park Service policy seeks to protect these fragile resources whether or not wilderness is authorized. Such designation does, however, offer further protection from the possibility of errors in management or change in agency policy.

Constant harvesting of food in the intertidal zones in Hawaii has depleted many items previously plentiful. The opihi, a form of limpet, is typical of such items. Traditionally a great delicacy for Hawaiians and a standard part of luau fare, this species of shellfish is becoming increasingly scarce. Difficult access through the wilderness and the distance involved in hauling the catch naturally limit the number taken. Thus, wilderness designation will assist in preserving this unique food supply.

#### MISCELLANEOUS

Section 3 of the park extension act (52 Stat. 7810) approved June 20, 1938, authorized the Secretary of the Interior, under certain conditions, to lease homesites within the Kalapana Extension to native Hawaiians under such rules and regulations as he may deem proper. Such occupancy must not encroach on or prevent free access to any points of historic, scientific, or scenic interest or in any manner obstruct or interfere with protection and preservation of park resources. If such homesites were to be granted by the Secretary, occupants would be required to reside on the land not less than 6 months in any one year to retain the homesite. Such provisions are incompatible with wilderness; therefore, none of the Kalapana Extension lands are proposed for wilderness designation.

In addition, the same act provides that native Kalapana Hawaiians and visitors under their guidance are reserved the exclusive rights to fishing along that section of the coast within the Kalapana Extension. Establishment of wilderness would have little effect on this provision except that it would continue to assure that much of the coast would be accessible only by trail. Moreover, the impact of any potential homesite development on wilderness would be negligible. The major reason is that the land that may be suitable for homesites is separated from the wilderness units by the Chain of Craters Road, by new lava flows or buffered by heavily vegetated areas. Further, the number of homesites, if granted, would be small enough to have no appreciable effect on overall visitation.

Archeological resources will not be affected by wilderness designation since this action, in itself, entails no construction. But sites on wilderness land will enjoy greater protection simply because they are within lands on which formal development is prohibited. Occasionally, however, fence construction, new trails to be located in the future or relocated, may increase visitor use of the wilderness. As previously mentioned, backcountry shelters are a specific potential danger to archeological resources, particularly along the coast.

Within Hawaii Volcanoes National Park, seven sites have recently been placed on the National Register of Historic Places. Three of these, Kilauea Crater, Whitney Seismographic Vault, and the Old Volcano House, are located outside the wilderness boundaries. Wilkes Campsite is near the summit of Mauna Loa in proposed wilderness Unit 1. The upper part of the Ainapo historic trail is also in Unit 1. Proposed Unit 2 contains the other two sites, the 1790 Footprints area and a part of the Puna/Kau Historic District. This latter area encompasses all of the park's coastline and much of immediately adjacent land. An eighth site, the old Mauna Loa Trail located in proposed wilderness Unit 1, has been nominated and declared eligible for the Register. Wilderness will have no appreciable impact on any of these sites except that it will afford them added protection as they are in areas where minimum development and use is assured.

#### MITIGATING MEASURES INCLUDED IN THE PROPOSED ACTION

Certain measures will be required to prevent damage to or loss of those elements of the wilderness that are particularly sensitive to outside influences. Other measures are designed to facilitate important research projects and management programs or control visitor use and its impacts.

Research projects on wilderness lands must continue to further the general pursuit of knowledge about volcanism and to supply data for resource management programs. U.S. Geological Survey handles the volcano observatory and its associated programs, some of which are adversely affected by wilderness designation, especially where it is necessary to have vehicular access to specific backcountry sites. Where this is especially important, such as the intensive research area in the upper Kau Desert, this impact has been mitigated by excluding the land from wilderness Unit 2. In Unit 1 there is a special provision proposed for motorized access to the summit of Mauna Loa for U.S. Geological Survey research purposes. Including this area in wilderness would greatly increase the complexity and expense of conducting volcanic research. For all wilderness units, the proposal includes a special provision to allow continuation of research operations, including placement of new instruments and the use of helicopters by the U.S. Geological Survey. This too, will partially mitigate the adverse impact of wilderness designation on research.

Control of the goat population will continue under wilderness status, using similar techniques as before--direct shooting by park staff, goat drives, and control by special deputized citizens. Only the continuation and expansion of goat fences, as noted earlier in this statement, is in potential conflict with the inferred intent of wilderness designation. Because of the real danger of this conflict in the future, this mitigating measure is especially important. Fences are considered absolutely essential to the success of the control program. Indeed, it is so important, that the proposal includes a special provision to mitigate the possible effect of wilderness on the goat control program, a provision to allow continuation and expansion of fences in Units 1 and 2 as proposed in the master plan and the resources management plan. The impact of goat fences on the environment is discussed in this statement as well as in the environmental statements supporting those plans.

Public use of Hawaii Volcanoes backcountry will necessitate provision of certain amenities not generally permitted within wilderness. Developed water supply is particularly important since no natural surface water is available in the park. To provide this service, tanks to store rain collected from trail shelter roofs are proposed in Units 1 and 2.

On the coast, the main purpose of the shelter roofs is to provide fresh water, since none is available naturally. These shelters and water storage tanks are included in the proposal as a special provision of the wilderness legislation to mitigate the impact of wilderness designation on visitor use. Further, in Hawaii, almost everyone camps near the coast and is prepared only for the warm balmy nights at that elevation. The freezing temperatures experienced on the upper slopes of Mauna Loa are simply not part of the image of a tropical isle. Thus, continued use of the existing shelters is particularly important as a means of mitigating the special adverse impact of wilderness designation on visitor use in high elevation areas.

Throughout the proposed wilderness, sensitive location of trails and shelters will be an important method of mitigating their esthetic impact. This can be done primarily by avoiding prominent sites seen from long distances and planning a low profile design for structures. Identification of important historic and archeological sites will also affect trail and shelter location.

Specific sections of the proposed wilderness boundaries are located to mitigate potential impact from wilderness designation. Exclusion of intensive research areas has been discussed previously. The entire Kalapana Extension has been excluded to mitigate any possible social and cultural impact on native Hawaiians that would result from extinguishing any opportunities for homesites.

Some major sections of land where eruptions could take place have been included in wilderness. Along the Chain of Craters, however, sections where eruptions are most likely to occur have been excluded from wilderness. This will help mitigate the severe limitation on visitor use, which would result when major eruptions occur on wilderness land.

Information will be provided to the backcountry visitor concerning available facilities such as campsites, trails, and shelters. He will be alerted to those features unique to the Hawaii wilderness--dangers in coastal areas and around volcanic features, scarcity of water, and endangered species of plants and animals. Much of this can be accomplished through signing and interpretive programs. This will provide considerable assistance in managing and utilizing the resource, and will ultimately improve the quality of the environment and of the individual visitor's experience. Specifically, these measures will help mitigate the effect of wilderness on limiting visitor use in these roadless areas. Moreover, it will help minimize the direct physical impact on historic and biological resources that will result from continued use by hikers, riders, and fishermen.

Studies will be initiated as part of a backcountry use study now underway, to determine the carrying capacity, or the optimum number of persons that can use the wilderness during a specified period of time. Two predominant issues are involved: the quality of the visitor's experience and preservation of the physical wilderness environment. Such capacities can be an excellent basis for developing management policies. Closely allied with this is waste collection and disposal. This is not a serious problem as yet in Hawaii since backcountry travel is light. But as use increases, it will be necessary to remove wastes from the wilderness, design disposal means to meet environmental standards, or limit use to the point where the amount of waste generated will not affect the resource.

It is expected that total park visitation will continue to increase, placing more pressure on all park resources. To assist in protection of wilderness land and its sensitive endemic plants and animals, complementary facilities will be developed both inside and outside the park on non-wilderness land to provide information and access points for backcountry trips. Such facilities include hotels, restaurants, shops, interpretive devices, and information centers. Furthermore, major viewpoints along the Chain of Craters Road and other park roads allow visitors to view and enjoy the wilderness. These facilities, both inside and outside the park, help decrease the pressure for increased use of wilderness land by providing alternative methods of viewing much of the wild land resource without having any direct impact on that land. This then becomes a measure to partially mitigate the adverse effect of limiting use of wilderness land through non-development.

Finally, to help mitigate any potential danger to archeological and historic resources resulting from backcountry use or construction of fences or shelters, the requirements of Executive Order 11593 will be observed. A professional survey will be made to determine the extent and significance of any cultural remains present. If necessary, locations of trails, fences, and shelters can be moved to avoid historical or archeological sites, or any properties designated on the National Register of Historic Places.



ADVERSE IMPACTS WHICH CANNOT BE AVOIDED  
SHOULD THE PROPOSAL BE IMPLEMENTED

Wilderness designation will result in some adverse impact. Since the action is essentially non-development, resulting physical changes in the environment are negligible or non-existent. There are, however, some adverse social and biological effects that will result.

Use of the wilderness for on-site activities will generally be limited to those physically fit to hike long distances or those who have the funds to hire horses and/or pack animals. And that large segment of the public who are dependent on mechanical or motorized travel will be excluded, although to some extent this is by choice.

The water storage tanks and backcountry shelters will be esthetic intrusions in the officially delineated wilderness. Further, since use will be more concentrated in these areas, there will always be some danger to nearby native vegetation and historical or archeological sites.

The U.S. Geological Survey's research facilities are small and, in themselves, offer little threat to park resources. Even so, they will continue to be intrusions into wilderness and will require trips into wilderness for service or replacement. The same pattern will follow for management and research operation by the National Park Service. Furthermore, should volcanic eruptions occur on wilderness lands, even more research and operational traffic will be necessary to and from these sites, wherever they may be.

Although many locations where eruptions are most likely to occur are excluded from wilderness, the summit of Mauna Loa, and sections of Kilauea's rift zones are part of the wilderness proposal. Thus, future eruptions could take place on lands where vehicular access would be prohibited. As a result, wilderness designation may have the impact of preventing visitor access to future eruption sites.

The program of feral animal control, mainly goats and pigs, will continue to require foot and horse travel both on trails and cross country. The impact of management travel in the wilderness will manifest itself in trampling of vegetation and the continuing danger of introduction of exotic species in this sensitive environment.

Drift fences as well as the use of helicopters will also continue as intrusions into the wilderness for visitors, since only part of this impact can be mitigated by sensitive location of trails and shelters.

There will also be an unavoidable increase in the cost of management and research programs for both the National Park Service and the U.S. Geological Survey. This increase will stem predominantly from the requirement that no vehicular access be allowed.

Hawaii Volcanoes perhaps more than any mainland park is sensitive to man's travel, even to the occasional visitor who hikes along the trails. This is particularly evident in insular plant and animal communities such as the Olaa fern forest and the small isolated kipukas. That any human use can cause damage is clear and is evidenced by the steadily diminishing number and extent of native Hawaiian species.

Even with sensitive resources taken into consideration, Hawaii Volcanoes backcountry is capable of handling a considerable increase in visitation. At some time in the future, however, a capacity will be reached and the number of visitors to specific areas controlled. At that time, pressures on adjacent non-wilderness lands will also be greater, and unless there is a specific capacity enforced for use of those lands, there will be danger of increased resource damage.

THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF  
MAN'S ENVIRONMENT AND THE MAINTENANCE  
AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The major benefits of a Hawaii Volcanoes wilderness are educational, scientific, and inspirational. Many of these benefits will increase in value as the State continues to become more urbanized, thereby, diminishing similar areas elsewhere. This is particularly significant in this unique island chain with its numerous plant and animal communities that exist nowhere else. Geologic values involving an almost perpetually active volcano have their own unique and singularly effective way of protecting themselves from man's intrusive practices.

As is the case with many mainland wilderness areas, continuous inappropriate or excessive use can result in the loss of that quality of human experience uniquely afforded by the wilderness, and this occurs perhaps even more quickly than the deterioration of the wilderness resource itself. In the long run, the benefits associated with maintaining this large acreage as open space can be expected to have a positive effect on the island's economy, including expanded resort industries.

Additionally, the research benefits available in the park are especially significant. Studies involving geology, archeology, evolution of plant species, and the survival of insular populations in an environment little changed by modern man will provide increasing benefits seemingly far removed from Hawaii Volcanoes National Park and the entire State, but vital to man's use of all the earth's resources. The continuing pursuit of this knowledge entails some short-term uses that conflict with wilderness--extensive research facilities, fences for control of goats, and added travel by management and research personnel. But the long-term results of this data thus obtained far outweighs the esthetic impact and will help insure the continued existence of many of the park's fragile resources as well as further the knowledge of volcanic processes in Hawaii and elsewhere.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES  
WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION

In accordance with the wilderness proposal and the resulting management practices, there are few irrevocable uses of resources. And rather than allowing consumptive uses, the wilderness will, in fact, insure resource preservation. Wilderness severely inhibits development and no change in the wilderness line can be accomplished without Congressional approval. This, in a sense, is a commitment of resources in that economic benefits derived from development are unavailable. But there are few, if any, inherent resources suitable for commercial development. The volcanic formations contain no mineral value, and there is no merchantable timber except a few acres of Koa forest in the lower part of proposed Unit 1. The tree ferns, especially in Olaa fern forest could be carved into kiis (traditional Hawaiian image) or harvested for hapuu ( a medium for orchid growing). Tree ferns, however, are available elsewhere and grow over much of windward Hawaii.

Kilauea's summit and rift zones are areas of enormous volcanic heat energy; proposals have been advanced to tap this energy to produce geothermal electric power. The edge of wilderness Unit 2 is the Southwest Rift zone of Kilauea; if such geothermal potential is real along this rift zone, it can be physically exploited as easily on lands adjacent to the rift on the mauka (mountain) side outside the park. Unit 3 includes a small portion of the East Rift at Makaopuhi, Napau and Alae Craters; again, if geothermal potential proves real, only a very small portion of the East Rift and none of Kilauea summit or lower East Rift is within the wilderness proposal. Development of geothermal energy within the National Park--whether wilderness or not--is not proposed.

Nearly all coastal lands in the State of Hawaii have some potential for resort development. Only one small beach (Halape) exists along the park's entire windswept coast. When compared with the ideal climate and gentler coastline of Kona and other islands, retaining this section of coast as wilderness appears even more appropriate.

The wilderness line as proposed, including the special provisions, avoids a commitment of resources that would preclude the continued pursuit of geological and biological knowledge. Although the proposal will encourage visitor use of the wild lands through a special provision to provide minimum comfort, the essence of wilderness will be preserved.

## ALTERNATIVES TO THE PROPOSED ACTION

During the wilderness study, several alternatives to the proposed wilderness line were considered. Except for the alternative of no wilderness, they apply to specific portions of the park's roadless area that were considered as a deletion or addition to the wilderness as now proposed. Each is discussed below as a separate alternative.

### ALTERNATIVE A--No Wilderness Designation

Management of most of Hawaii Volcanoes backcountry would be essentially the same, regardless of whether or not wilderness designation becomes a fact. The impact resulting from non-wilderness status, however, is considerable in regard to research and management programs and certain developments for public use.

Research, especially those programs accomplished by U.S. Geological Survey, would be easier and less expensive. Eruptions occurring anywhere within the park could generally be reached by a four-wheel-drive vehicle carrying all necessary equipment. New research facilities could more easily be constructed in these or other locations if necessary.

Management programs, particularly goat control, would also be less expensive. Four-wheel-drive vehicles could be used for construction and maintenance of fences.

New eruptions are always a primary source of interest to all park visitors. As long as such activity occurs on non-wilderness land, it can be made available by mechanical means. This applies to the visitor and management alike. Except for emergencies, mechanical transportation would not be permitted should a new eruption occur in an area designated as wilderness. Non-wilderness status would allow roads covered by fresh lava flows to be rebuilt on any alignment deemed appropriate for access and public use.

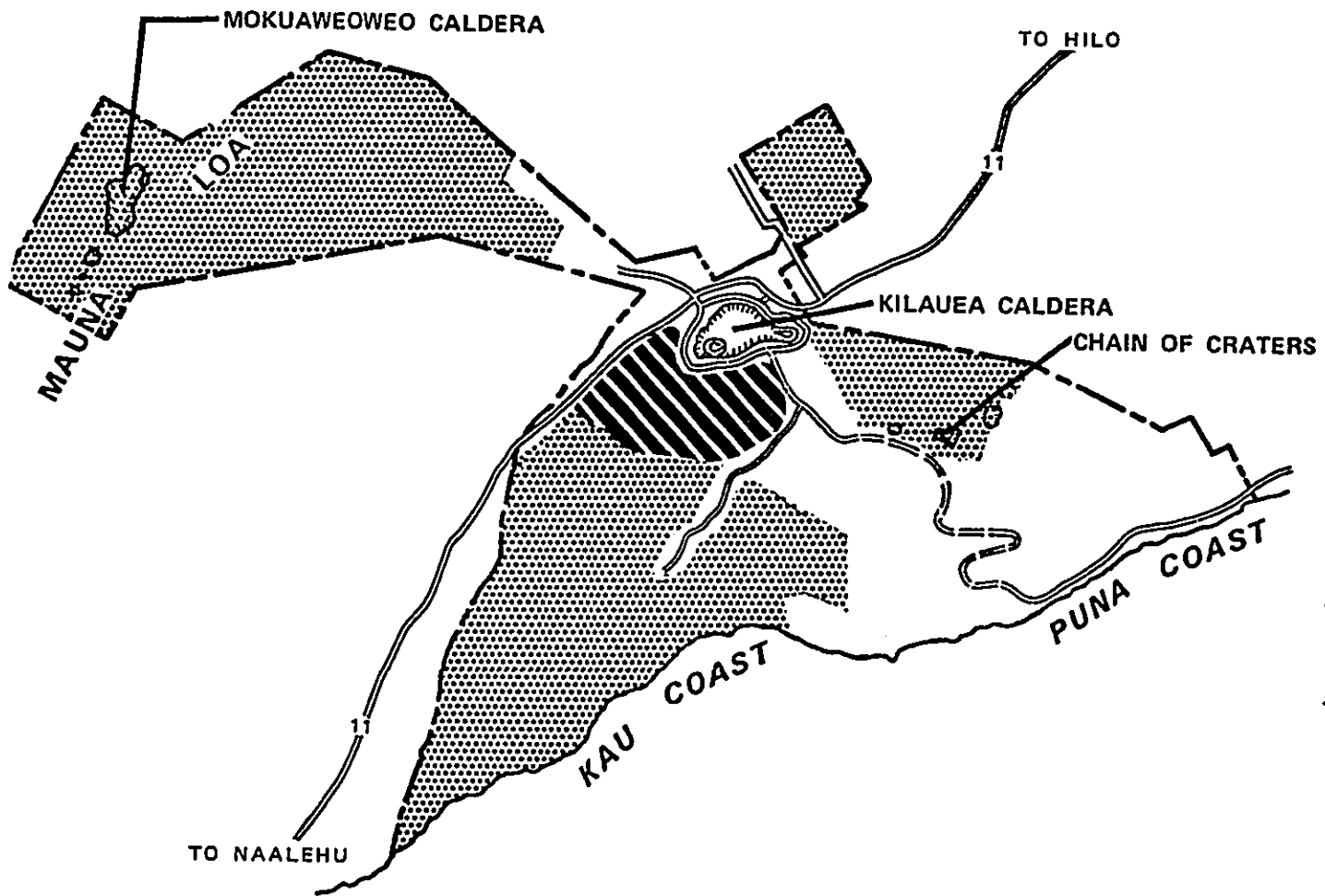
Recreational use of the park's vast coastal resources would continue to be limited to hiking, fishing, and camping. Non-wilderness would, however, allow greater freedom for construction of new backcountry facilities such as camp shelters and water supply systems, thus making it more convenient for visitors and increasing capacities. Such development would also increase the danger of damage to native biological communities. This would be especially apparent in those species sensitive to man-induced influences.




The Olaa fern forest would be little affected by non-wilderness status since the National Park Service would continue to protect this important resource and the master plan proposes it as a research natural area. Non-wilderness status would, however, place a less effective guarantee that the current non-developed status would continue.

Finally, it should be noted that with no wilderness designation archeological resources in the park's roadless areas would be afforded less protection as there would always be a greater potential for development.

ALTERNATIVE B--Inclusion of Concentrated Research Area in Upper  
Kau Desert

Research in the vicinity is closely associated with Halemaumau Firepit and the volcano observatory, the most concentrated research area in the park. Access has traditionally been by four-wheel-drive vehicle and the program is proposed by U.S. Geological Survey to continue. There are about 20 sites that are visited on an average of 5 times per month. Installations include geodimeters, tilt stations, and seismometers. Wilderness status for this area would add a maximum of 10,000 acres. No visitor facilities are planned here, even though the southwest rift sustains frequent volcanic activity. Most research would not be prohibited, but would be much more expensive, due to required access by horseback or trail. Geodimeter transects, however, would be effectively prohibited because they would require a fleet of helicopters.



-  PROPOSED WILDERNESS
-  PARK BOUNDARY
-  MAJOR ROADS



## **ALTERNATIVE B**

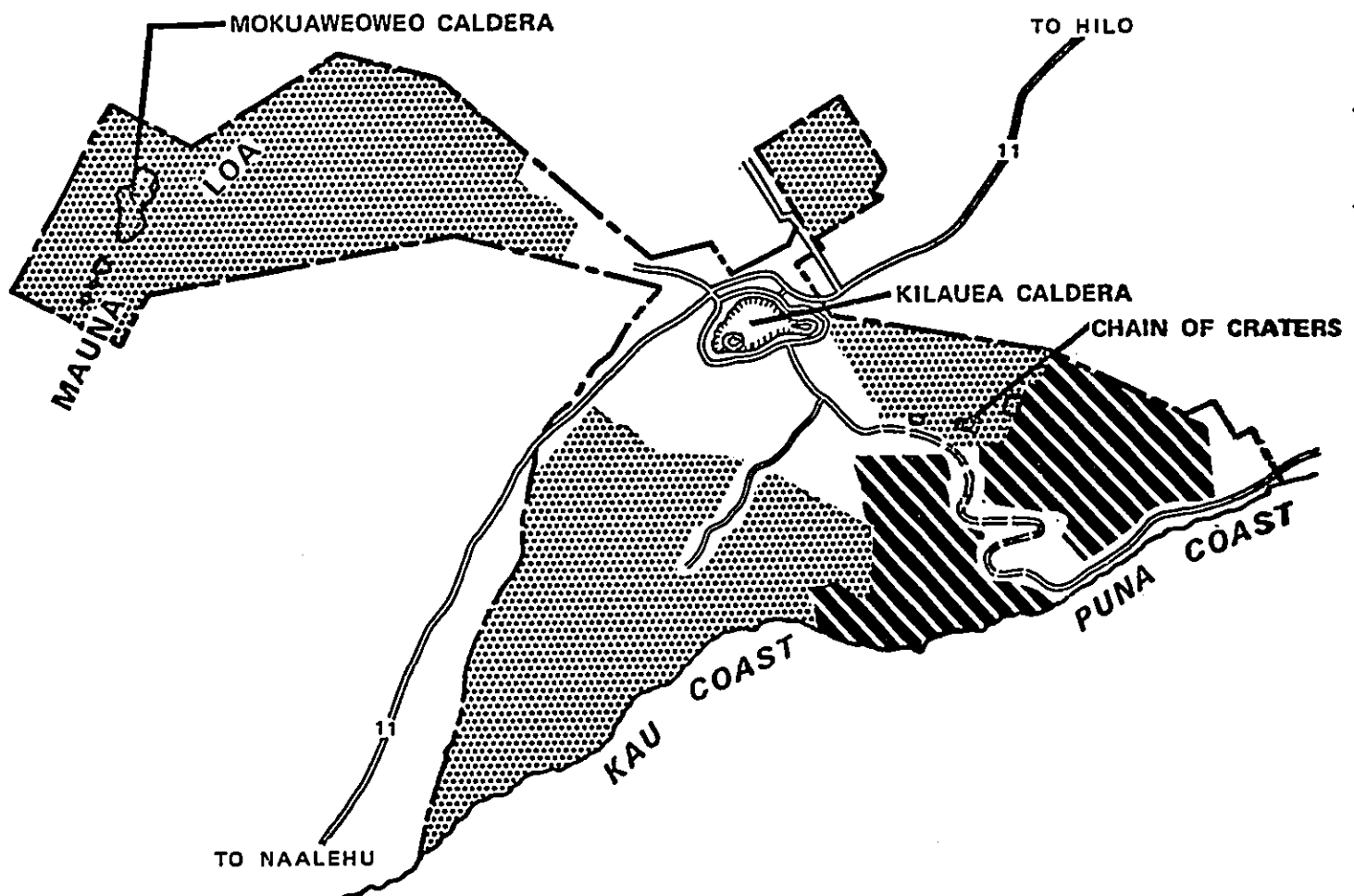
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ALTERNATIVE C--Inclusion of Portions of the Kalapana Extension

This alternative would add approximately 17,000 acres to proposed Unit 2 and 22,000 acres to Unit 3. Thus, considerably more park acreage would be added to those lands designated as wilderness. And these lands contain important resources--Puuloa petroglyph field, scattered archeological sites, and rare species of endemic plants and birds. It would not change the proposed visitor-use pattern since no developments other than trails are proposed here.

The dominant impact would be social and cultural. The 1938 act authorizing the Kalapana Extension also authorized the Secretary of the Interior to lease homesites to native Hawaiians if they did not impinge on biological, scenic, or historic resources. Wilderness status would remove almost the entire extension from consideration for homesite use.



-  PROPOSED WILDERNESS
-  PARK BOUNDARY
-  MAJOR ROADS



## **ALTERNATIVE C**

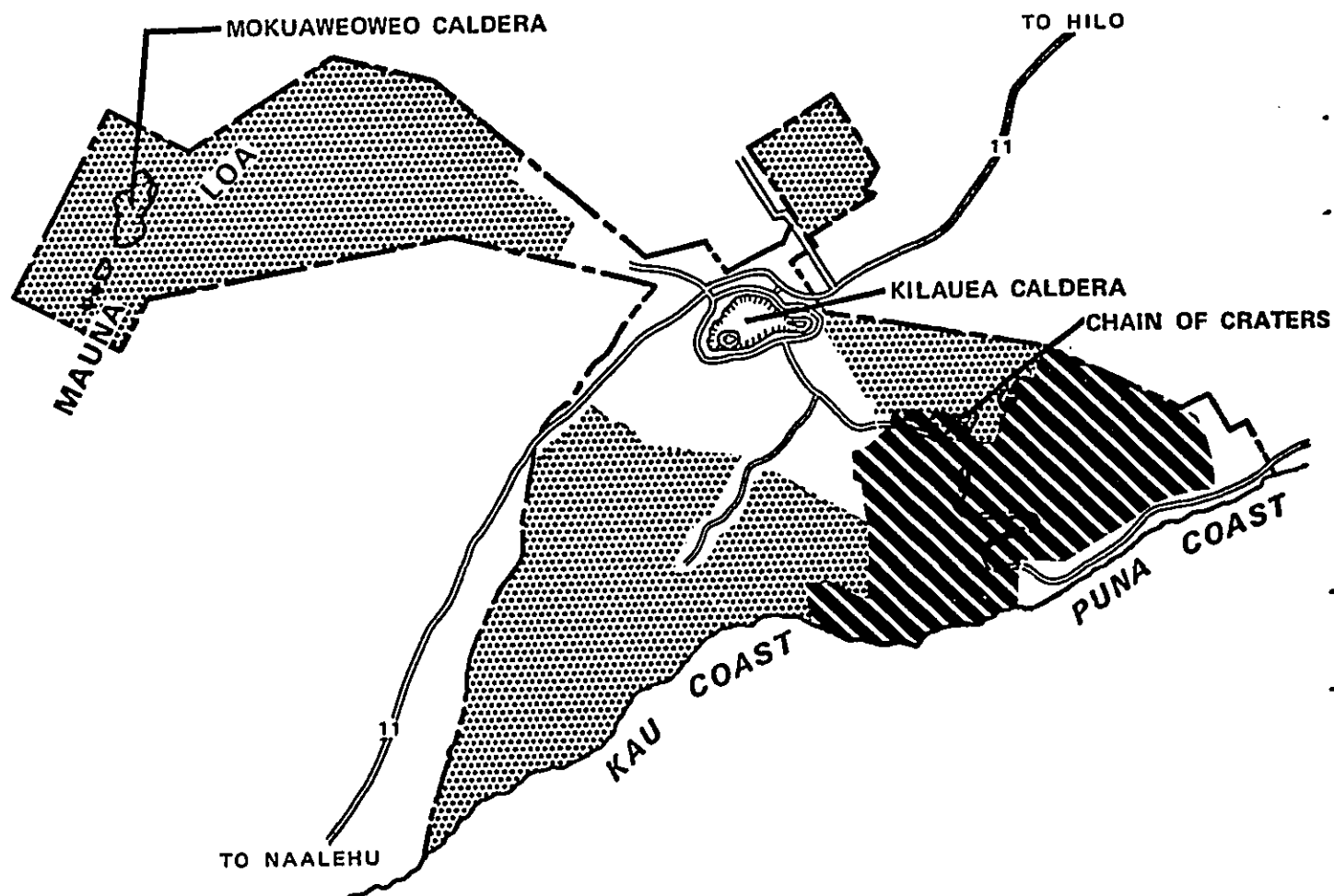
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ALTERNATIVE D--Designation of the Entire Chain of Craters and Adjacent  
Palis Mauka as Wilderness

This is similar to Alternative C except that here the section of the Chain of Craters Road recently covered by lava would also be designated wilderness.

Prior to 1965, there was no road connection between Kilauea and Kalapana. The new Chain of Craters Road became a popular tourist route both for tour buses and for visitors travelling by car. Recent lava flows between 1969 and 1973 have covered about 10 miles of the road with fresh lava, closing it to travel. Since the area is again roadless, it could be proposed as wilderness, thus, joining Units 2 and 3 and creating an uninterrupted wilderness unit from the Kau coastline to the Chain of Craters and the ohia/fern forest to the northeast. It would add approximately 7,500 acres to that area in Hawaii dedicated to open space. It would also restrict visitor access, development, and research operations. This is, along with Kilauea, the most active volcanic area in Hawaii and a subject for concentrated research. Wilderness status would prohibit reconstruction of the Chain of Craters/Kalapana road and would remove from the tourist travel pattern the popular route joining Kilauea, Kalapana, Hilo, and Kapoho vicinity.

In addition, there would be the same dominant social and cultural impact noted in Alternative C.



-  PROPOSED WILDERNESS
-  PARK BOUNDARY
-  MAJOR ROADS



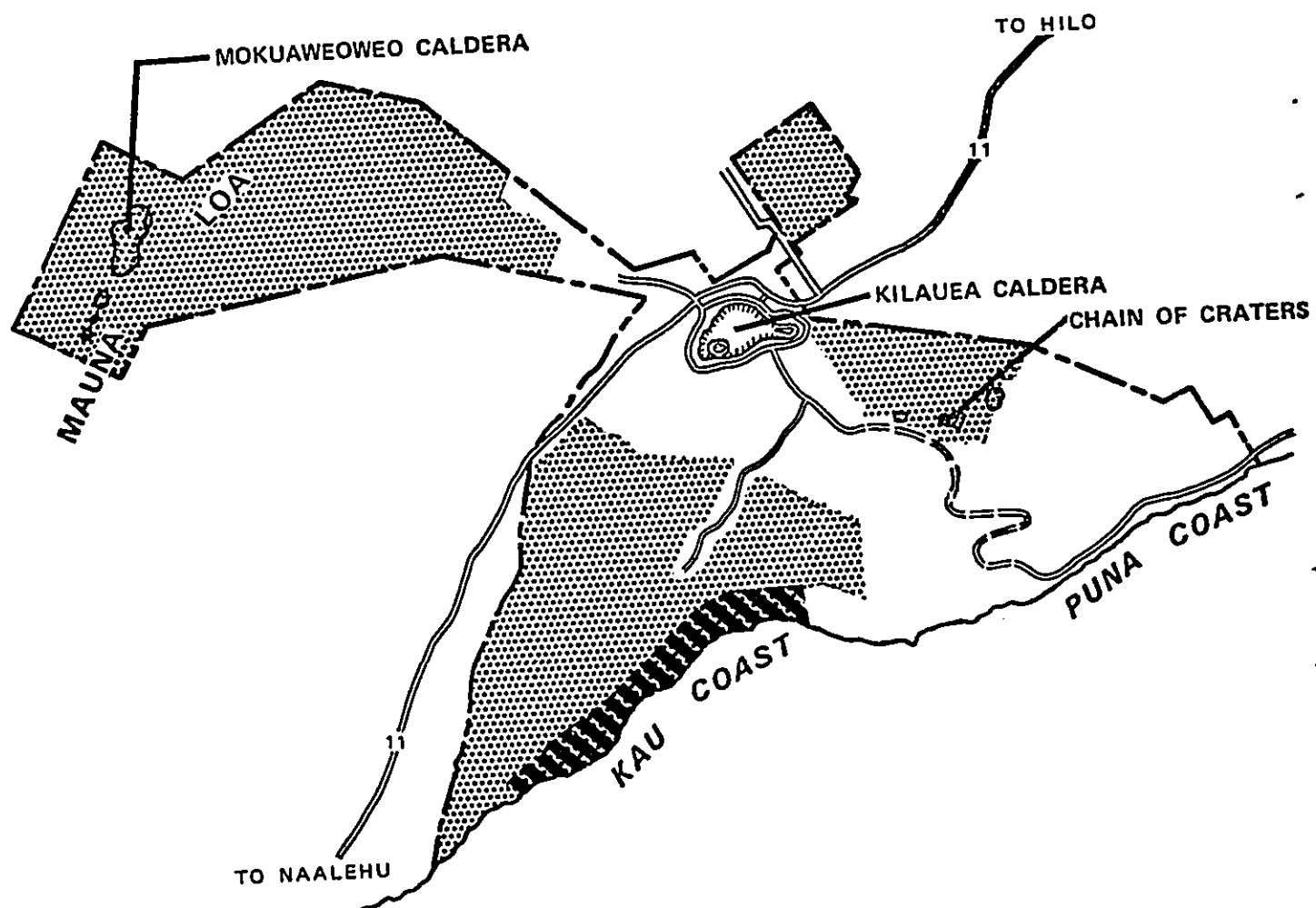
## **ALTERNATIVE D**




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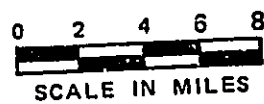
ALTERNATIVE E--Exclusion of a Coastal Strip from Wilderness

This has been covered to some extent under Alternative A, but here the possibility is to leave an entire coastal strip consisting of about 10,000 acres outside wilderness and zone it for more concentrated backcountry use. This would permit construction of sophisticated camping shelters, water supply systems, and if necessary, paved trails.

Three dominant impacts can be cited. The remaining wilderness would contain fewer developments. The impact of use on the coastal resources would be greater due to the added visitation, which might be doubled or tripled over that experienced if the area were wilderness. There would also be greater impact on historical and archeological resources, and greater danger to native biota. More visitors mean more trampling of vegetation and greater disturbance of the many archeological sites that exist along this coastline.



-  PROPOSED WILDERNESS
-  PARK BOUNDARY
-  MAJOR ROADS

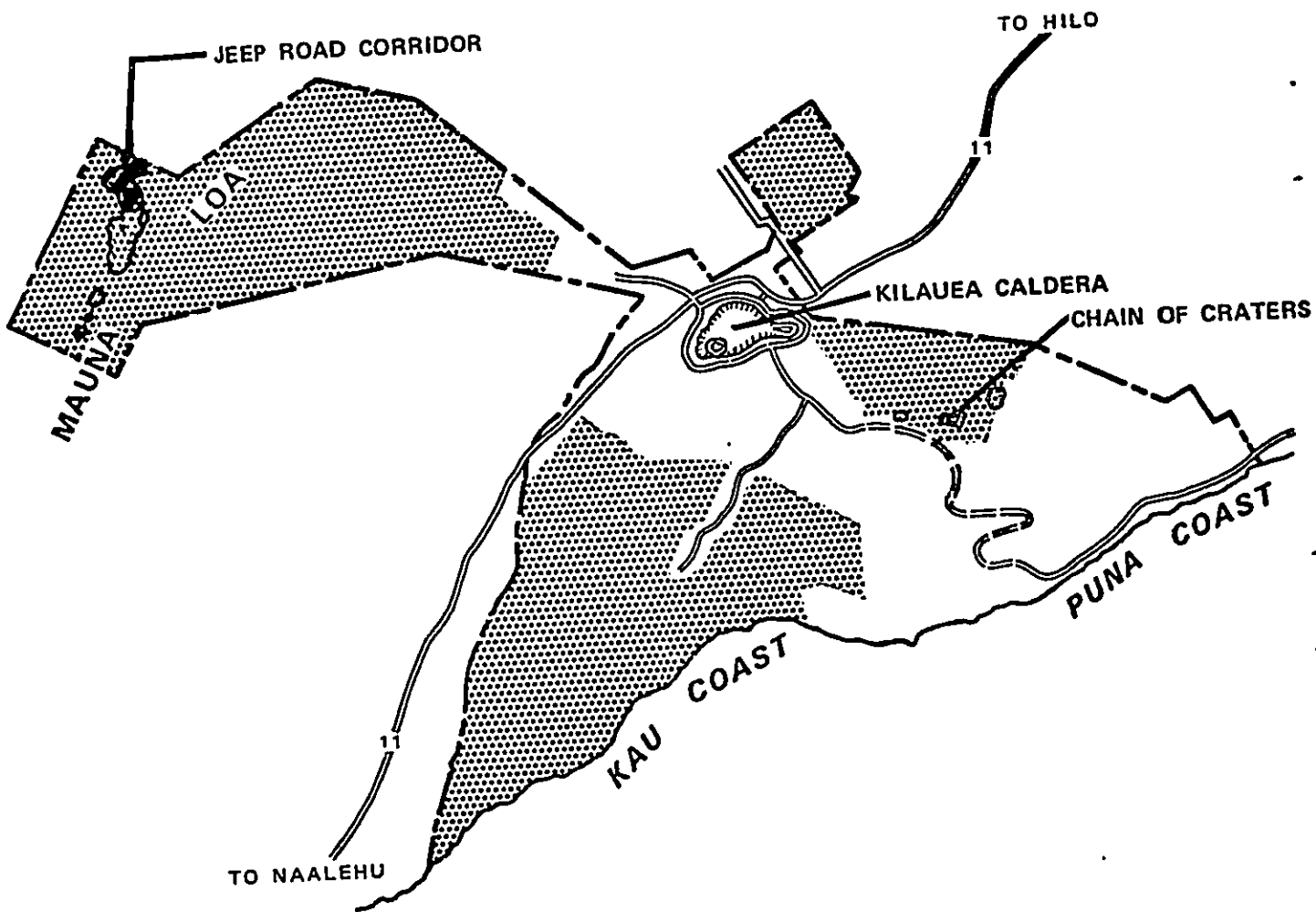



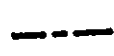
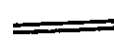
 **ALTERNATIVE E**

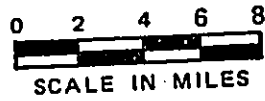
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ALTERNATIVE F--Exclusion of the Jeep Road to the Summit of Mauna Loa

It is important to the U.S. Geological Survey's research program that there be a jeep road route open to the summit of Mauna Loa. Excluding such a route from wilderness would clearly leave the route open for research purposes. Since it would be publicly designated as non-wilderness on maps, it would also encourage unauthorized use by visitors with four-wheel-drive vehicles. Moreover, at some time in the future, it is likely that lava flows will cover the existing route. This might necessitate a new routing not excluded from wilderness and would require a change in the wilderness boundary.



-  PROPOSED WILDERNESS
-  PARK BOUNDARY
-  MAJOR ROADS



 **ALTERNATIVE  
F**

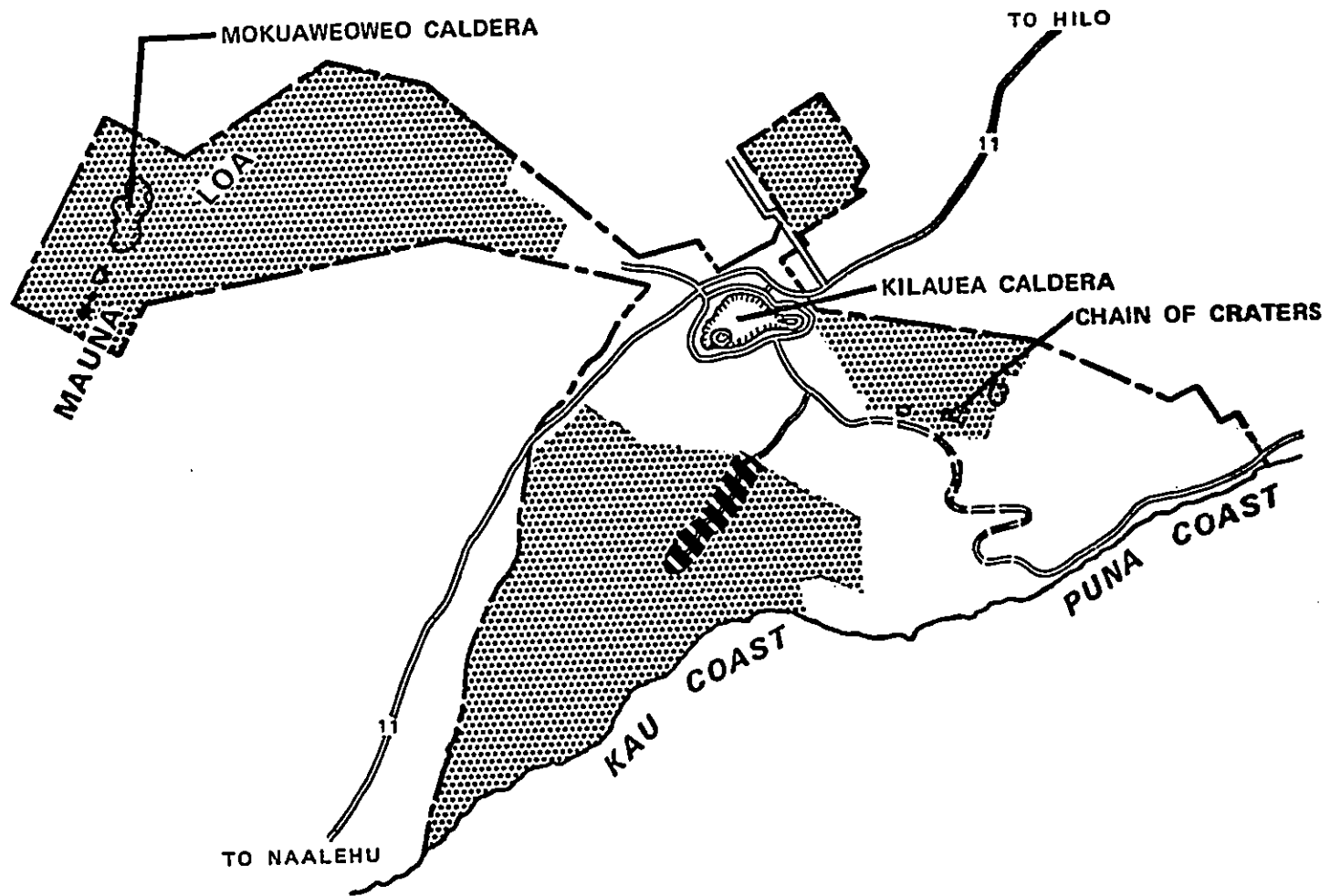
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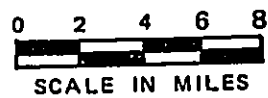
ALTERNATIVE G--Inclusion of the Hilina Pali Road Corridor in Wilderness

This alternative would add about 3,000 acres to wilderness Unit 2 and would create a more completely enclosed wilderness parcel without the intrusion of a corridor of non-wilderness land. Since the road is currently used for management and visitor access to the pali and coastal section of the park, the required removal of the road would add to the cost of the research and management operations associated with the coastal backcountry. This increase would be felt most acutely in the U.S. Geological Survey research activities and in the park's goat control program.

In regard to visitor use, the existing road terminus offers a spectacular view of nearby palis (cliffs) and much of the park's coastline. Removal of the road would also eliminate the opportunity for car-bound visitors to experience this view, unless they wished to walk at least 5 miles. Furthermore, the road terminus would then be a less logical location--one without an appropriate destination. The current terminus provides that appropriate destination point at the edge of the pali and invites the visitor to investigate the vast wild area in view before him.



-  PROPOSED WILDERNESS
-  PARK BOUNDARY
-  MAJOR ROADS



## **ALTERNATIVE G**

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## CONSULTATION AND COORDINATION

### CONSULTATION AND COORDINATION IN THE DEVELOPMENT OF THE PROPOSAL AND IN THE PREPARATION OF THE DRAFT ENVIRONMENTAL STATEMENT

During the preparation of the wilderness recommendations for Hawaii Volcanoes National Park, many sources outside the National Park Service were consulted and asked to make suggestions and recommendations. The following list is indicative of the types of sources contacted.

#### Department of the Interior

U.S. Geological Survey--volcanic research, its impact on wilderness, and how wilderness might restrict research.

#### State of Hawaii

Office of the Governor and Lieutenant Governor--general review of wilderness proposals and impact on the State.

Department of Land and Natural Resources--general review and discussion of specific State programs as they apply to or are affected by Federal programs. (Examples - management of wildlife, construction of use facilities, and administration.)

County of Hawaii--effect of proposals on county plans for park and recreation, access patterns, and land use.

University of Hawaii--student participation in obtaining detailed data on possible impact resulting from wilderness proposals.

Bishop Museum--use of previous studies on archeological resources.

#### PUBLIC MEETINGS ON THE WILDERNESS STUDY

Public hearings on the Hawaii Volcanoes wilderness proposal were held at three locations in Hawaii: Hilo, Kona, and Honolulu on February 20, 23, and 26, 1974, respectively. At Hilo, there were 28 persons present and 9 oral statements were presented. At Kona, approximately 10 persons were present and 2 oral statements were made. In Honolulu, about 12 persons were present and 9 oral statements were made.

In general, conservation groups and individuals supported the National Park Service's preliminary proposal. Individuals and organizations from Hawaii generally favored the special legislative provisions proposed in the preliminary report; the same organizations from the mainland generally opposed these provisions.

One individual and one organization objected to the establishment of wilderness within Hawaii Volcanoes National Park. Their objection was related mainly to the very existence of the park and the way in which the land is managed by the National Park Service.

The Hawaii Chamber of Commerce made reference to potential development of geothermal power within the immediately surrounding Hawaii Volcanoes National Park. The area within the park with the most potential is the Kilauea summit area. The 2,050-acre potential wilderness addition in the extreme southwest corner of the park abutting wilderness Unit 2 also offers a possible prospect as a geothermal energy site.

Comments and responses are summarized below:

#### Conservation Groups

The Wilderness Society broadcast a memorandum to members recommending that the special legislative action to accommodate activities or facilities listed under the proposed special provisions are unneeded. A total of 74 individuals submitted letters supporting the National Park Service wilderness proposal but objecting to the need for the special provision.

Friends of the Earth, Arizona Branch; the Sierra Club; Southwest River Study Committee; and the Wilderness Society submitted views that supported the wilderness proposal, except they opposed the five special provisions as being unnecessary.

Local representatives of the Hawaiian Audubon Society, Hawaiian Botanical Society, Bishop Museum, Life of the Land, Hawaiian Entomological Society, Conservation Council of Hawaii, and Wildlife Society favored inclusion of the special provisions. Additionally, the local Audubon Society, Bishop Museum Conservation Council, Life of the Land, and Entomological Society felt that the special provision regarding feral animal control should mandate that these actions be done and maintained in the future as a measure to protect the wilderness.

Comment: The special legislative language to accommodate activities in the proposed special provisions are unneeded; the Wilderness Act is sufficiently broad and flexible to allow them without the special language.

Response: The initial evaluations and studies conducted by the National Park Service and U.S. Geological Survey proposed that no areas within Hawaii Volcanoes National Park be designated as wilderness because the following activities and facilities occurring within backcountry areas of the park significantly exceeded those normally allowed in wilderness under the 1964 Wilderness Preservation Act.

- A) Measures to control feral goats and pigs include permanent fencing which divided the backcountry into manageable feral animal exclosure units. Mechanical methods, such as helicopters and power drills, are used to maintain the fences. Goats are controlled by techniques that include mechanical means.
- B) Measures to study and monitor volcanic activity include permanent installations and mechanical devices, which are serviced by mechanical means. Similar facilities and activities are not found to our knowledge in any other wilderness areas.
- C) Trail shelters with water barrel or tank storage is a long-established custom in this park.

The Park Service believes that these activities are essential to the needs of the people of the Big Island and are a reasonable and appropriate use of the Hawaii Volcanoes National Park backcountry. The special provisions proposed here will assure that these activities will not be either diluted or foreclosed.

Comment: The special legislative language related to feral animal control should be strengthened to mandate that the special measures for feral animal control will be carried out.

Response: The special provision recommended, if passed by Congress, would in itself constitute a Congressional direction that these measures be taken.

#### SUMMARY OF RESPONSES RECEIVED FROM PUBLIC HEARINGS

<u>Recommendation</u>	<u>Public Agencies</u>	<u>Private Organizations</u>	<u>Individuals</u>	<u>Total</u>
Support National Park Service proposal	5	13	96	114
Enlarge National Park Service proposal	2	0	4	6
Less wilderness	1	1	0	2
Oppose wilderness	0	1	1	2
Acknowledgement received	5	1	3	9
TOTAL	13	16	104	133

COORDINATION IN THE REVIEW OF THE DRAFT ENVIRONMENTAL STATEMENT

On October 26, 1973, the draft statement was made available for review by other Federal agencies and interested organizations and individuals. Copies were distributed by the Western Region, National Park Service and by Hawaii Volcanoes National Park to the following for comment:

Advisory Council on Historic Preservation  
Department of Agriculture  
    Soil Conservation Service  
Department of Defense  
    U.S. Army  
Department of the Interior  
    Bureau of Indian Affairs  
    Bureau of Land Management  
    Bureau of Mines  
    Bureau of Outdoor Recreation  
    Bureau of Reclamation  
    Fish & Wildlife Service  
    Geological Survey  
Department of Transportation  
Environmental Protection Agency  
State of Hawaii Clearinghouse  
    State Historic Preservation Officer  
Metropolitan Clearinghouse  
Audubon Society  
Bishop Museum  
Congress of the Hawaiian People  
Life of the Land  
Sierra Club  
Society of American Foresters  
The Hawaiians  
The Nature Conservancy  
University of Hawaii  
Wilderness Society

The following is a list of agencies, organizations, and individuals who submitted comments on the draft statement. A copy of each is included in the Appendix of this statement.

Advisory Council on Historic Preservation  
Department of Agriculture  
    U.S. Forest Service  
Department of the Army  
    Corps of Engineers  
    Kilauea Military Camp  
Department of Commerce

General Counsel  
 Assistant Secretary for Environmental Affairs  
 Environmental Protection Agency  
 Federal Power Commission  
 Department of Housing and Urban Development  
 Department of the Interior  
   Office of the Secretary  
   Bureau of Land Management  
   Bureau of Mines  
   Bureau of Outdoor Recreation  
   Bureau of Reclamation  
   Geological Survey  
   Bureau of Indian Affairs  
   Fish and Wildlife Service  
 Department of Transportation  
   Federal Highway Administration  
 United States Senator  
   Hon. Hiram L. Fong  
 State of Hawaii  
   Acting Governor George R. Ariyoshi  
   Department of Planning and Economic Development  
   Department of Land and Natural Resources  
 County of Hawaii  
   Mayor Shunichi Kimura  
   Planning Department  
 Aloha Association  
 Congress of the Hawaiian People  
 Conservation Council for Hawaii  
 Friends of the Earth, Arizona Branch  
 Hawaii Audubon Society  
 Hawaii Botanical Society  
 Hawaii Island Chamber of Commerce  
 Hawaii Isle Fish and Game Association  
 Life of the Land  
 Society of American Foresters  
 Southwest River Study Commission  
 The Wilderness Society  
 George Alderson (as typical of 74 letters from individuals with the  
   same general comments regarding lack of need for special provisions)  
 John Alexander (as typical of 25 letters from individuals with the  
   same general comment endorsing the plan)  
 Drs. Otto and Isa Degener  
 Dr. Kimball S. Erdman  
 Thomas F. Horobik  
 Bruce A. Jacobsen  
 Russell K. LeBarron  
 Malcolm H. Mossman  
 William P. Mull

Specific Comments and Responses are as follow:

ADVISORY COUNCIL ON HISTORIC PRESERVATION

Comment: Your draft environmental statement appears adequate regarding our area of expertise and we have no further comment to make.

U. S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE

Comment: The intent of the Wilderness Act would be violated by providing the backcountry shelters for visitors. Section 4(c) of the Wilderness Act of 1964 prohibits such facilities for visitor use.

Response: Hiker shelters with a small water tank to store rain water drained from the shelter roof is a long established practice at Hawaii Volcanoes and other Hawaiian parks that lack fresh water. The park master plan proposes to continue use of these at specific locations. In this case, a special provision has been requested in the wilderness designation for Hawaii Volcanoes National Park rather than to exclude these places from wilderness.

DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS

Comment: Measures to mitigate construction damage within wilderness boundaries to preserve native animal and plant communities and individual species could be discussed.

Response: These are discussed in detail in the Hawaii Volcanoes Natural Resources Management Plan Environmental Impact Statement, FES 74-28. In general, however, such mitigative measures would include: occasional review by local botanists, monitoring by park personnel, close supervision of participants in any construction and/or control program, design of fencing to cause minimum disturbance to native cover, continuing research on current programs to discover possible damage or identify new and better techniques, no physical developments in the vicinity of archeological features, and clearance by an archeologist of any new plantings or construction.

Comment: Discuss Federal costs to relocate campsites, construct roads, water catchment systems and tanks, or to acquire land.

Response: Funding estimates to implement proposed actions in the plan are in park files for public review. It should be noted, however, that there are no roads to be constructed within wilderness.

Comment: Expand discussion to provide information on whose authority wilderness will be created and what steps must be taken to have the decision approved.



Response: The proposed wilderness described here will be recommended to the President and to Congress under authority of Public Law 88-577 of September 3, 1964.

Comment: Provide data on how many persons will be using the park or how recreation benefits are computed, and how wilderness management will be organized to control recreation activities within wilderness.

Response: Visitor use history and projections are discussed on pages 27, 28, and 29 in some detail. Generally, however, park use has continued to increase along with the increase in general visitation to the Island of Hawaii and the State. Use of the backcountry will also continue to increase, 1,000 to 1,200 overnight visits in the 1960's and about 2,500 in 1972. Control of the type of and amount of recreation activities in wilderness will be accomplished mainly through careful location of trails and overnight shelters, availability of water, and the capacity of facilities (trails and shelters) to provide for visitors. Recreation benefits, as such, are not usually computed for use in national parks planning.

Comment: Discuss the proposed plan's relationship to other Federal, State and county land use programs.

Response: Page 10 of this statement has been revised to describe the relationship of this planning effort to other planning for the Island and the State.

#### DEPARTMENT OF COMMERCE, GENERAL COUNSEL

Comment: Because operation of petroleum-fueled stoves on Mauna Loa interferes with the NOAA Observatory studies, the use of petroleum fuels at the Red Hill and Mauna Loa summit cabin should be prohibited.

Response: Through the voluntary registration system for people hiking Mauna Loa, the park will encourage and request that people use alcohol rather than petroleum-fueled stoves and heaters. Park Service units at these locations have been converted to alcohol type. Location of proposed shelters has been modified to place all shelters on the Kilauea side of Mauna Loa--away from the NOAA Observatory side of the mountain.

Comment: Vehicular access to Mauna Loa's upper slopes should be controlled to prevent pollution interference with the Observatory's studies.

Response: We agree. The intent is that such access will be only for volcanic research.

Comment: Recommend a "Special Provision" be made for the NOAA Observatory similar to that for Geological Survey studies.

Response: The analogy to Geological Survey studies to NOAA's needs is not comparable. Special provisions for the Survey's studies are to allow a degree of mechanization not ordinarily tolerated in

wilderness. It seems that wilderness designation itself helps protect the clean air environment essential to NOAA's studies and that another special provision is unneeded. Moreover, the wilderness proposal involves only those lands now within the existing park boundaries. The NOAA Observatory lies outside the existing boundary. However, the Park Service recognizes these special environmental needs and wishes to cooperate in protecting the air environment essential to this research. The master plan and the impact statement recognize the possibility of some air pollution resulting from expanded trail use and use of gas stoves. It also proposes to locate new trails and shelters in a manner that will minimize this potential pollution problem.

Comment: Suggest that Mauna Loa Observatory be recognized in a manner similar to that for Kilauea Military Camp.

Response: The two organization's situations are not comparable. Kilauea Military Camp is located on Park Service land and operates on a longstanding special use permit. Mauna Loa Observatory is situated well outside the park.

Comment: Recommend recognition and protection of the unique air environment of the upper slopes of Mauna Loa and state the intent to protect this resource.

Response: A statement to this effect will be prepared as one of the park objectives and will be incorporated in the park master plan.

Comment: Encouragement of use of remote areas including the summit and slopes of Mauna Loa, particularly at elevations above 6,000 to 8,000 feet, is not compatible with the preservation of the air environment.

Response: Hiking, camping, nature study, and research have long been a recognized public use of Mauna Loa summit. The National Park Service proposes that this use continue, that trails and recreational opportunities will be identified and publicized. Plans have been modified, however, to place all shelters and the most extensive trail system on the Kilauea side of the summit, away from NOAA's Observatory. Campers will be encouraged to use alcohol, rather than petroleum-based fuels to reduce pollution to NOAA's studies. In the long view, this plan to designate Mauna Loa summit wilderness should allow greater public use of a type that has the minimum pollution impact on the summit areas. This use of Mauna Loa summit seems the most compatible in protecting the clean air environment required by the Mauna Loa Observatory--short of closing the summit to all public access.

Comment: The proposed public terminus for the existing Mauna Loa Road should not be above the 6,500 foot elevation.

Response: No change is proposed in the terminus of the Strip Road that leads to a trailhead at 6,662 feet in elevation on the Kilauea side of Mauna Loa. The public terminus for the Mauna Loa Road access to the trail on the Saddle side of the mountain will continue to be determined by NOAA at Mauna Loa Observatory.

DEPARTMENT OF COMMERCE, OFFICE OF THE ASSISTANT SECRETARY

Comment: Add statements to recognize that atmospheric research in clean air environment is of equal importance to conservation/public use aspects, that there be continued road and utility corridors, operation of research devices, and that the proposed boundaries be extended down slope.

Response: The wilderness proposal deals solely with the existing park rather than park expansion as proposed in the master plan. The comments relative to the NOAA research station is more relevant to the master plan and will be addressed in that document and its EIS.

Comment: Request that automobile access and parking arrangements recently agreed upon by the NPS and Mauna Loa Observatory be continued and explicitly recognized in the environmental statement.

Response: The first paragraph on page 6 is changed to read that the parking area will be several miles below Mauna Loa Observatory.

Comment: Recommend recognition and protection of the unique atmospheric sciences research carried out at NOAA's Mauna Loa Observatory and mention the intent to protect the clean air environment essential to this research.

Response: A statement to this effect will be prepared as one of the park's objectives and will be incorporated in the park master plan.

Comment: Alternate F involving the establishment of a jeep road corridor would seriously pollute the Mauna Loa clean air environment. We would find this alternative unacceptable.

Response: Alternative F was considered and discarded.

ENVIRONMENTAL PROTECTION AGENCY

Comment: Comments on the draft statement have been classified as "LO-1," specifically lack of objections to the proposed action.

FEDERAL POWER COMMISSION

Comment: The wilderness proposals would not affect any existing electric power or natural gas facilities under jurisdiction of the Federal Power Commission and would not appear to have any effect on the future development of supplies and transmission of electric power or natural gas.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Comment: Since the Federal Government is precluded from purchasing the land, how will private lands be acquired.

Response: New legislation is required to enable these purchases.

Comment: Alternative L, designation of a parcel of land for Hawaiian homesteads could be comfortably accommodated within the plan.

Response: This comment relates to the master plan and will be discussed in the environmental statement relevant to that plan.

Comment: Harry K. Brown and Kaimu Beach Parks are not identified in the texts. Does the proposed plan include these areas?

Response: The county parks are not affected by this plan.

DEPARTMENT OF THE INTERIOR

Comment: Concur with permitting Geological Survey research in areas proposed as wilderness.

Comment: The environmental statement for the master plan does not consider potential for geothermal energy.

Response: Dr. Gordon MacDonald suggested that the wilderness addition at the Great Crack (Tracts 26 and 27) may be an area with possible geothermal energy potential.

We propose delaying any acquisition of this land--already within the authorized boundary of the park--until its geothermal energy potential has been amply explored and defined. Only if investigations fail in finding energy sources will these lands be acquired for park purposes.

BUREAU OF LAND MANAGEMENT

Comment: Document received; no comments.

BUREAU OF OUTDOOR RECREATION

Comment: Document reviewed and agreement noted.

BUREAU OF MINES

Comment: Recognize the need for special provision to carry on U.S. Geological Survey research.

Response: The final wilderness recommendation retains this special provision to facilitate USGS research.

Comment: The environmental statement for the master plan does not discuss geothermal potential.

Response: Geothermal potential in the proposed wilderness area has been addressed in the response to the Department of Interior, page 68. The final environmental statement for the master plan will consider geothermal potential on lands proposed for addition to the park.

BUREAU OF RECLAMATION

Comment: Document reviewed and agreement noted.

GEOLOGICAL SURVEY

Comment: The importance of volcanic research must be stressed, and if the wilderness proposal is approved, the welfare of the island must be safeguarded by the special provisions allowing motorized access for research and for the installation of instruments that might otherwise be incompatible with wilderness status.

Response: In recognition of the Geological Survey's important and necessary functions, the final wilderness recommendation retains the special provision to facilitate volcanic research.

Comment: The only feasible method to meet further increases in demand for water seems to be an expansion of the present method of water catchments and storage systems. The effects of the expansion upon the environment should be considered in the environmental statement.

Response: A special provision for the traditional method of obtaining water within the proposed wilderness units has been retained in the final wilderness recommendation. The effects on the environment of simple shelters with water barrels should not be significant. Indirect adverse impacts may occur, however, due to human use in and around these structures. The master plan and the final environmental statement will address the water problems in regard to non-wilderness and developed areas.

BUREAU OF INDIAN AFFAIRS

Comment: We are concerned mainly with the proposed "Wilderness Threshold Zone" and "Backcountry Zone" and with the wilderness areas proposal and alternatives. The basic problem in this kind of a situation is: (1) How to minimize damage to unique natural resources; and (2) How to maximize human enjoyment of these resources. Autos and campers are heavy polluters. These are encouraged under the proposed plans - even though eventual rationing is foreseen in use of the wilderness areas.

Response: The Park Service has discouraged or prohibited travel by mechanical means in the backcountry. The Wilderness proposal will permanently exclude the private automobile from over half of the existing park acreage. Although minimal shelters will be constructed in the wilderness for overnight use, they are not designed to attract the type of camping that can severely degrade environmental quality.

Comment: We would like to submit another alternative which would come closer to a minimum damage-maximum enjoyment solution. The suggested alternative is a system of secondary roads for park vehicles only, joined by a system of foot trails for day hikers only. The park vehicles here include small buses carrying hikers to trail heads as well as non-hiker sightseers. We believe this system will let more people see more of the park and with less damage than the proposed system.

Response: The concept of the Wilderness Threshold Zone proposed in the master plan closely approaches the suggested alternative. However, limiting the wilderness areas only to day hiking would not allow the visitor time to travel very far into the high rugged terrain or down into the dry coastal zone.

Extending roads further into the backcountry to accommodate a day hike to various points of interest was not considered feasible or desirable. A shuttle bus system is proposed in the master plan to accommodate as many as 20,000 night visitors who wish to view new volcanic activity. This system could also serve the day visitor if the need arises.

FISH AND WILDLIFE SERVICE

Comment: Document reviewed and agreement noted.

DEPARTMENT OF TRANSPORTATION

Comment: If Alternate D, designating entire Chain of Craters and adjacent palis as wilderness, the programmed project ERFOO2(1) should be withdrawn.

Response: Alternate D was considered during the planning process and rejected.

SENATOR HIRAM L. FONG

Comment: Acknowledge receipt of wilderness planning document.

ACTING GOVERNOR GEORGE R. ARIYOSHI - STATE OF HAWAII

Comment: Acknowledge receipt of wilderness planning documents.

DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT - STATE OF HAWAII

Comment: Wilderness proposal is in accord with the goals of the State General Plan.

DEPARTMENT OF LAND AND NATURAL RESOURCES - STATE OF HAWAII

Comment: The plan and impact statement adequately considers requirement of historic preservation for those sites known to be of National Register quality, as well as those which are of lesser value.

MAYOR SHUNICHI KIMURA - COUNTY OF HAWAII

Comment: Acknowledge receipt of wilderness planning document.

PLANNING DEPARTMENT - COUNTY OF HAWAII

Comment: There should be clearly stated boundary lines for units being proposed as wilderness, in compliance with administrative policies of the National Park Service.

Response: The boundaries, as described, are considered sufficient for the purpose of presenting the wilderness recommendation to the President and to Congress. Detailed maps and legal descriptions will be drawn after Congress enacts the legislation to establish the area as wilderness.

Comment: A discussion of permitted activities within the wilderness area would be helpful. Part of the proposal's confusion relative to fishing stems from vague implications.

Response: The proposed wilderness designation has little effect upon fishing in the park. A few brackish springs in fault cracks (without fishable populations) are the only waters within the proposed wilderness. The ocean is outside park boundaries and the wilderness proposal. Other activities (riding, hiking, camping) within proposed wilderness would be similar to activities existing in these areas today, since these lands are now managed as wild lands.

Comment: None of the alternatives listed are suitable.

Response: After considering the alternatives in terms of viability and in light of public response, they have been rejected in favor of the original proposal.

Comment: The statement that there will be little or no increase in cost of archeological research is not the case.

Response: We agree and have made these changes in the impact section of the proposal on page 33.

Comment: Facilities for expanded numbers of visitors to the park should be kept outside the park rather than on non-wilderness lands in the park.

Response: We are in agreement that facilities developed outside the park make it much less necessary for expansion of lodging, restaurant, and shopping facilities in the park. This subject will also be covered in greater detail in the master plan and its final impact statement.

#### ALOHA ASSOCIATION

Comment: Request to be kept informed as to all proposed actions, testimony, and decisions regarding any land in which the Federal Government is to be involved.



Response: It is the policy of the National Park Service to keep the public informed of decisions as they are being made to provide opportunity for comment and discussion. Moreover, once wilderness recommendations have been submitted to Congress, they will be available to the public on request.

#### THE CONGRESS OF THE HAWAIIAN PEOPLE

Comment: The National Park Service has violated the criteria for preservation of cultural resources on the Island of Hawaii.

Response: Although this matter is more germane to individual planning documents for the various park units in Hawaii, it is the opinion of the National Park Service that the wilderness proposal will have no adverse effect on significant cultural resources. Please refer to page 37 and to the letters from the Advisory Council on Historic Preservation and the Hawaii State Historic Preservation Officer, pages A-1 and A-43.

The National Park Service seeks full compliance with the National Historic Preservation Act of 1966 and with Executive Order 11593. All planning documents are reviewed by the State Historic Preservation Officer for the determination of effect. If an effect is determined to be adverse, the Advisory Council is given an opportunity to comment. Furthermore, on-site consultations have been held with the State Historic Preservation Officer for individual projects that may affect cultural resources in City of Refuge National Historic Park, Puukohola National Historic Site, and Hawaii Volcanoes National Park. His letters of comment are on file with the State Director's Office. Procedures for compliance will be complete when a Memorandum of Agreement is received from the Advisory Council on Historic Preservation for all planning documents.

Comment: The National Park Service has failed to confer with representatives of Congress of Hawaiian People who as individuals and as members have made claims for homesites.

Response: Over the years four individuals have applied for homesites in Hawaii Volcanoes National Park:

Homesite Applicant	Date of Application
Joseph Nakea	December 2, 1970
Alma K. Cooper	April 5, 1973
Robert Keliihomalu	April 11, 1973
James T. Bates	January 28, 1975

National Park Service representatives have met with three of these applicants and corresponded with the fourth. On November 25, 1974 a draft planning document "Kalapana Extension Homesites" was circulated for public comment on the conflicting points of law relative to homesites within the park. Hawaiian groups, including Congress of the Hawaiian People, received copies of the document and were asked to provide review and input for the plan.

Comment: The architecture of the Wahaula Interpretive Center is closely akin to a Japanese tea house.

Response: This indeed may be one subjective impression of the architecture. But, of the millions who have visited the center since it was built, the Park Service has not had other complaints of this nature.

Comment: Lavatories at the Kalapana Visitor Center are directly over the ancient Hawaiian trail.

Response: In the planning stages, it was felt that lavatories would be necessary at the visitor center. This has proven to be true. They are adjacent and 155 feet away from the site of an old Hawaiian trail--not directly over it.

Comment: The center is too close to the heiau; the displays are of general Hawaiiana rather than of Paao; its art work is stylistic and inappropriate; some narrative text and labels are misleading and inaccurate.

Response: The planning team for this center considered many alternatives of theme, design, texts, location and visitor routine. No one design could satisfy all needs. The plan selected had these objectives:

"The Kalapana Visitor Center, located at the Wahaula Heiau is expected to become a key entrance and orientation stop for the park. The visitor will find the principal interpretation of Hawaiian native culture presented here through conducted walks into the ruin and the interpretive museum with its audio-exhibits. The Kalapana Visitor Center will also be the starting point for the series of wayside interpretive exhibits along the Kalapana Road . . . A strong effort has been made in the total design of the museum and visitor center to maintain a Polynesian atmosphere and feeling. This theme is reinforced by graphics of the exhibits and architectural treatments within the exhibit area."

Though the entire interpretive plan is far from completed--the park receives generally favorable comments, indicating that the center has come close to achieving its stated objectives. Exceptions have been persistent complaint from many visitors regarding the lack of water, electricity, and telephone as well as the Congress of the Hawaiian People's broad objection to nearly all aspects of the interpretive endeavor there.

Comment: Adverse effects on resources at the City of Refuge.

Response: This Environmental Statement does not deal with the City of Refuge National Historical Park. The plans relevant to that area are submitted to the State Historic Preservation Officer, and are made available to the public for comment.

Comment: The Park Service has failed to construct and install an elevated wooden walk for public use and to protect the petroglyphs at Puuloa.

Response: Puuloa is not in an area affected by the wilderness proposal. However, a development project to design and develop a trail to protect and exhibit the petroglyphs is in the park's 5-year development budget request process.

Comment: The Park Service failed to record the site of Kahue Village before the flow of the volcano covered it.

Response: Twenty-one sites at Kahue were recorded during a study financed by the National Park Service in the early 1960's (Sites 143-157 and 231-236, Hawaii Volcanoes Archeological Base Map and Survey).

Comment: Archeological Survey and recording of Kealakomo Village, now lava-covered, was not undertaken or reported.

Response: Kealakomo sites were recorded, described, and mapped for the National Park Service by Emory et al, 1959<sup>1</sup>; Smart, 1965<sup>2</sup>; Emory et al, 1965<sup>3</sup>; and Ladd<sup>4</sup>.

Comment: The National Park Service has failed to present a plan for designation of land area for inclusion of homesites and has failed to properly advertise the homesite provision.

Response: To avoid foreclosing future decisions regarding homesites relative to the 1938 Act, none of the Kalapana Extension lands have been proposed as wilderness; the wilderness recommendation does not affect the homesite provisions one way or another.

Comment: The investigation of Hydrothermal Systems at Kilauea Volcano was conducted on sacred, religious grounds of Hawaii ancestors. The decision to allow the research did not include representation of the Hawaiian people, but was made by the National Science Foundation, Department of the Interior, Union Oil, and representatives from large industries.

Response: The investigation was conducted on the site of a gravel pit that had been used for decades. As a prerequisite to the project, the National Science Foundation was required to restore the site and gravel pit to as near in appearance to adjacent terrain as possible at completion of the studies. Photos on page 79 show this completed restoration. No lands nominated to the National Register of Historic Places or proposed for nomination were involved. Decisions approving the conditions under which research proceeded, and broad supervision of the research was by the Superintendent of Hawaii Volcanoes National Park and the Chief Scientist of the Hawaiian Volcano Observatory.

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<sup>1/</sup> Emory, K.P., K.H. Cox, W.J. Bonk, Y.H. Sinoto, and D.G. Barrere, 1959. Natural and Cultural History Report on the Kalapana Extension of the Hawaii National Park Vol. 1, Cultural History Report. Bernice P. Bishop Museum, Honolulu for the National Park Service. 173 pp. mimeo, including charts and photos.

<sup>2/</sup> Smart, D., 1965. An Archeological Survey of Parts of Hawaii Volcanoes National Park, Hawaii. Part I. Bernice P. Bishop Museum for the National Park Service. 102 pp. mimeo, with charts and photos.

<sup>3/</sup> Emory, K.P.E., J. Ladd, and L.J. Soehren, 1965. Archeological Resources of Hawaii Volcanoes National Park, Hawaii. Part II, Additional Sites, Test Excavations and Petroglyphs. Bernice P. Bishop Museum for the National Park Service.

<sup>4/</sup> Ladd, E.J. 1971. Plan and Topography Kealakomo before 1971 lava flow. National Park Service drawing 124:4005, 9/71.

Comment: The Hydrothermal Systems Study Environmental Impact Study has not been circulated for public information and reaction.

Response: In compliance with the National Environmental Policy Act of 1969, the U. S. Geological Survey, in consultation with the National Park Service, prepared an environmental assessment of an Investigation of the Hydrothermal System at Kilauea Volcano, Hawaii. The assessment, completed in January 1973, did not indicate a significant environmental impact from the proposed action. Consequently, an environmental statement was not prepared. The environmental assessment was, and is, on file at the U.S.G.S. Hawaiian Volcano Observatory on Kilauea Rim, and at Park Headquarters of Hawaii Volcanoes National Park. At a public meeting, February 23 in Hilo with the Congress of the Hawaiian People, both Dr. Robert Tilling of the Geologic Survey and Superintendent Bryan Harry of the National Park Service stated that an environmental assessment had concluded there would be no significant environmental impact from the proposed action. On March 8, 1973 a copy of this environmental assessment was sent to Donald K. Martin, representing the Congress of the Hawaiian People.

The investigation was begun April 6, 1973 and ended July 9, 1973. Prior to and during the investigation, the Congress of Hawaiian People were concerned about two aspects of the project: (1) the ownership of any geothermal energy, and (2) desecration of the Kilauea site. With the completion of the project, it is evident that the Geological Survey were careful in heeding these concerns. The site at an old gravel pit was restored (photos page 79) to its pre-gravel pit contour. The question of ownership of the geothermal energy remains moot; within a National Park such potential energy may not be exploited.

Comment: The potential source of hydro-electric power raises the issue of ownership rights and this matter has not been resolved.

Response: The National Park Service does not intend to allow power plants for exploiting potential energy sources within Hawaii Volcanoes National Park--even if development of such source becomes technically feasible.

Comment: The backcountry has inadequate cabins, water facilities, and corral facilities. The cabin at Halape is locked and is not for public use.

Response: The Halape shelter and all other patrol cabins are unlocked and open to the public. This wilderness proposal and the master plan were developed concurrently. They propose a special provision to allow nine backcountry shelters (with water barrels to hold rainwater draining from the shelter roof) within wilderness for public use.

Comment: There is no horse or mule concession in the park.

Response: Volcanoes Park had commercial horse concessions from 1959 to 1965 operated variously by Alika Cooper, Tony Olivera, and James Dowsett. The service was discontinued because public interest was not sufficient to sustain a commercial operation--unless the operation was subsidized by the park allowing long-term grazing for the concessioner's stock. In a park with extensive effort to restore native plant ecosystems, such grazing operations would be an adverse park use.

Comment: The Park Service discourages wide use of the backcountry.

Response: The Park Service discourages or prohibits travel in its backcountry by mechanical means and commercial exploitation of its backcountry resources--but otherwise encourages backcountry use by developing trails, giving information about its backcountry, allowing public use of ranger patrol cabins and shelters, and performing search and rescue services for backcountry travellers in trouble.

Comment: Ancient Hawaiian trails are left unattended and are inaccessible for public use.

Response: Some trails are left as unused historic sites. Many are maintained and marked with ahus as a part of the park's active trail system. All are open to public use compatible with preservation of the historic resource.

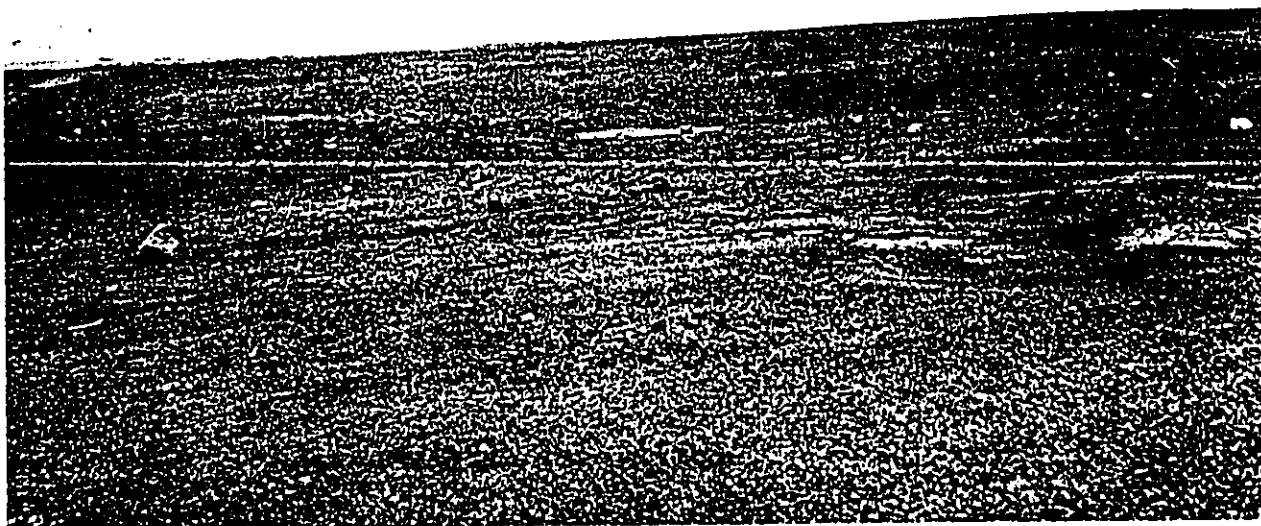
Comment: Lack of adequate goat control allows native plant destruction. The goat population exceeds 25,000. The Congress of Hawaiian People would be qualified to formulate a program to bring the goat population under control.

Response: Vital to this wilderness proposal is the special provision to allow management activities required for the feral animal control fundamental to protect native plants. The combination of goat drives and sales, deputy ranger goat control, exclosure and drift fences, and control efforts by park personnel has been effective in reducing goat numbers.



Natural Kau Desert landscape adjacent to proposed gravel pit drill site.

Restored landscape at old gravel pit site after the 1973 National Science Foundation research.



Comment: The Congress of Hawaiian People listed eight mandates to the Park Service as follows:

Mandate 1: The said claims of ADVERSE EFFECT caused by undertakings presented in this document shall be placed before the Secretary of the Interior, Department of the Interior, and the National Advisory Council on Historic Preservation.

Response: The Congress of the Hawaiian People testimony is included in this EIS; it has been transmitted to the Secretary, Department of the Interior, and to the National Advisory Council on Historic Preservation as part of the wilderness and master plan deliberations.

Mandate 2: The Department of Interior present a constructive plan for the implementation of the Kalapana Extension Act which permits homesites for all Hawaiians in Section 3.

Response: The wilderness recommendation and master plan proposes no actions that will adversely affect the homesite provisions of the 1938 Act.

Mandate 3: The project, "An Investigation of the Hydrothermal Systems at Kilauea Volcano" will not begin as scheduled and after 60 days after the environmental impact study is distributed to Hawaiian groups and all interested persons will a decision on the date to commence the project be made.

Response: We believe that the environmental impacts of this study were properly assessed according to procedures related to Section 102(2)(c) of the National Environmental Policy Act. The investigators, at the completion of the study, restored the entire gravel pit area as well as the drill hole site.

Mandate 4: The persons and agencies associated with the project for the "Investigation of the Hydrothermal Systems at Kilauea Volcano," or those who will be engaged in the implementation of the project will arrange for as many meetings with a representative group to be named by THE CONGRESS OF THE HAWAIIAN PEOPLE. This shall be done before the beginning of the project implementation and during the project. It shall also be necessary that all proposed undertakings must first receive approval by the members of the group to be named by THE CONGRESS OF THE HAWAIIAN PEOPLE.



Response: Though agreement could not be reached--the project's principal investigator Dr. George Keller, USGS project scientist Dr. Robert Tilling, and the Park Superintendent met in Hilo with the Congress of Hawaiian People prior to the investigation. Superintendent Harry again met with representatives of the Congress at the proposed drill site prior to the investigation. USGS Chief Scientist Donald Peterson and Harry met with the Congress of Hawaiian People at the drill site midway during the investigation.

Mandate 5: All of the positions of management and supervision in the park units on this Island of Hawaii are to be placed with native Hawaiian people. The proceedings for this change in management and supervisory positions will be brought to the discussion table at the local and national level. Hawaiian representatives to be named by the CONGRESS OF THE HAWAIIAN PEOPLE will be at these meetings.

Response: It has long been the policy of the United States Government to provide equal opportunity in Federal employment on the basis of merit and fitness and without discrimination because of race, color, religion, sex or national origin.

Mandate 6: The Secretary of the Interior will create a position in the national office of the Park Service responsible for the affairs of the Hawaiian National Parks and this position shall be filled by a native Hawaiian.

Response: Though containing fine ancient Hawaiian cultural values, Hawaii Volcanoes National Park was established primarily because of its outstanding volcanic and biologic values. Management of the affairs of this park must be based upon deep understanding of these phenomena, as well as knowledge of preserving and interpreting the park's historic sites.

Mandate 7: The Hawaiian flag will be flown at each and every premise in the Park Service where the American flag is flown.

Response: This is a good idea.

Mandate 8: The Secretary of the Interior shall name the members of the Kaloko Advisory Board immediately and the National Park Service shall request of Representative Patsy T. Mink that she introduce a bill to extend the period for the study to include a full year to commence after the official body of the Kaloko Advisory Council is formed.

Response: This has been done.

EAST HAWAII CHAPTER OF THE CONSERVATION COUNCIL FOR HAWAII

Comment: Support the proposal, but favor allowing the Mauna Loa summit jeep road trail for use by park and research scientist use only. Also favor including some portions of Kalapana lands as wilderness.

Response: The intent of the proposal and the special provision is to allow use of the jeep road to Mauna Loa summit for research only. The discussion concerning the Kalapana lands and the impact and the reasons for not including any of that area in wilderness is discussed on page 49. Essentially, it was felt that it would be improper to include any Kalapana Extension lands while there is still the possibility of setting some of that land aside for Hawaiian homesites.

Comment: Would adoption of Alternative B provide further safeguard from possible development of geothermal energy?

Response: Probably not; leases may not be issued on any park lands for geothermal energy production whether or not designated as wilderness.

Comment: Can alternative C be redrawn to permit Hawaiian homesites near Kalapana?

Response: The homesite provision of the 1938 Act applies to the entire Kalapana Extension lands and, therefore, forecloses options of including any portions of these lands as wilderness. The Congress of the Hawaiian People are currently requesting that 25,000 acres of these lands be developed with homesites, communities, roads, electricity, and water for Hawaiians.

Comment: Does alternative C include the Ainahou Ranch?

Response: Alternative C and the Kalapana lands do not include the Ainahou Ranch. The mauka half of the Ainahou includes the area of existing buildings and is not among the lands proposed as wilderness. The makai half of the Ainahou lands is within wilderness unit 2.

FRIENDS OF THE EARTH, ARIZONA BRANCH

Comment: Favor the proposal, but do not agree with the need for special provisions.

Response: See the response to this general comment on pages 60 and 61.

HAWAII AUDUBON SOCIETY

Comment: Favor the proposal.

Comment: All four of the special provisions for management should be specifically written out in the legislation.

Response: The wilderness recommendations to Congress include the special provisions.

Comment: The fencing provision for feral goat control should be a mandatory directive to the park rather than discretionary, to prevent future policy changes allowing fence neglect and population increases of feral animals.

Response: This is a good point; yet merely having a special provision that allows the fencing and feral animal control measures in the park wilderness legislation is in itself a statement that Congress directs these actions to be done.

Comment: Strong arguments for maintaining the jeep road on the north side of Mauna Loa to the summit for weather observatory personnel are not presented.

Response: The wilderness proposal comment that this jeep road is for weather observatory personnel is a typographical error; this should read, for volcanic studies. The road is used now--and proposed to continue to be used--to enable Geological Survey scientists to service instruments and run deformation studies on Mauna Loa's summit and East Rift zones. These zones are sources of enormous lava eruptions that threaten the City of Hilo. As an early warning for volcano disasters, the Mauna Loa summit studies are the most important in Hawaii; at most times helicopters available on the Big Island capable of carrying payloads to service instruments at summit elevations are not available.

It is proposed that this road will be closed to public use. It is now gated and locked to all vehicular access except for geological studies and such park management functions as search and rescue.

Comment: There is no mention of how goats that are rounded up in drives will be removed from wilderness when four-wheeled vehicles are excluded from those areas.

Response: Obviously, it will be with greater difficulty. However, experience with completed fenced units shows that goat populations can be held to much lower levels with the fences. Goat drives may be an unproductive method of taking goats from smaller herds in fenced areas and searching out individual animals on foot or horseback will be more effective. If and when drives are necessary, horses would still be used, as well as helicopters.

#### HAWAIIAN BOTANICAL SOCIETY

Comment: Express strong approval of the wilderness proposal.

#### HAWAII ISLAND CHAMBER OF COMMERCE

Comment: Strongly favor the wilderness proposal with certain amendments.

Comment: Provision be made for vehicle access for volcanic research in Units 1, 2, and 3.

Response: The special provision for volcanic research will allow some degree of 4-wheel drive use and extensive use of helicopters for volcanic research. The special provision will allow USGS a freedom of research in designated wilderness that they now have in the de facto wilderness of the park.

Comment: Defer acquisition of the area (Tracts 26 and 27) which shows a potential for geothermal power.

Response: These tracts lie within the park's authorized boundary, but all attempts to acquire this land will be deferred until it is determined that geothermal energy extraction there is not feasible.

#### HAWAII ISLE FISH AND GAME ASSOCIATION

Comment: Are in general agreement with the plan.

#### LIFE OF THE LAND

Comment: Are in general accord with the proposal. Agree that special language for the problem of goat control is needed, and think that the park should be mandated through Congress to a boundary and internal fencing program to preserve wilderness values from these exotic animals. Agree also with the special provision to conduct volcanic and geologic research.

Response: Special provisions for goat control fences and volcanic research are included in the wilderness recommendations.

SOCIETY OF AMERICAN FORESTERS

Comment: Objects to the acquisition of land authorized by Congress (Tracts 22, 26, and 27) and their proposed designation as potential wilderness additions.

Response: Tract 22, being an excellent example of virgin ohia and fern forest and which qualifies for wilderness classification, would be given the highest order of protection if added to the Wilderness Preservation System upon acquisition. The acquisition of Tracts 26 and 27 will be delayed. See the response to the Department of Interior, page 68.

Comment: Acquisitions of authorized lands and those lands proposed for addition to the park in the master plan are opposed due to high costs of land acquisition. Beneficial multiple uses would be foregone if the land were included in the National Park System.

Response: Land acquisition will be addressed in the final environmental statement for the Hawaii Volcanoes master plan.

Comment: There has never been any documentation that any forestry practices in Hawaii have caused the extinction of any fauna in the islands.

Response: The implication that forestry practices were detrimental to native species has been deleted.

Comment: The National Park Service's policy of excluding hunters has allowed the build-up of goat and sheep populations. Such a management policy is in serious need of questioning. Wilderness area management further restricts the prospects of controlling feral animals. The topic is treated much too lightly in the EIS.

Response: Local hunters, acting as Deputy Park Rangers for purposes of controlling goats and pigs, are affecting feral goat and pig populations in the park. This is particularly true where boundary and drift fences impede animals from outside park boundaries from restocking park lands. During the past four years an average of 1,667 citizen deputy rangers have taken an average of 1,506 goats and 133 pigs each year.

The policy of exotic animal control and that of manipulating game species of a sustained-yield basis for recreational hunting differ radically in concept. The intent of the resource management programs in this national park is to control and limit the population of feral goats and pigs

within the park; the intent is not to maintain high populations for long-term, sustained yield recreation. A combined effort using boundary and drift fences, deputy ranger feral animal control, goat drives, and direct removal efforts by park personnel is significantly lowering the park's goat and pig populations. Likely, deputized citizen participation will decrease when feral animal numbers are reduced to low levels.

The goat control programs will not be unduly restricted under wilderness management, if the special provision for control measures is included in the legislation. The final environmental statement for the natural resources management plan (FES 74-28) discusses feral animal control in considerable detail.

#### SOUTHWEST RIVER STUDY COMMITTEE

Comment: Favor proposal except disagree with the need for special provisions.

Response: See the response to this general comment on page 61.

#### WILDERNESS SOCIETY

Comment: While fully supporting the proposal, the Wilderness Society opposes the special legislation for management measures by the Park Service.

Response: See the response to this general comment on page 61.

GEORGE ALDERSON (as typical of 74 letters from individuals with the same general comment regarding the lack of need for special provisions)

Comment: Favor the proposal to include 123,000 acres of Hawaii Volcanoes National Park in the National Wilderness System, but oppose use of the special legislative provisions, as these are acceptable uses under general provisions of the Wilderness Act.

Response: This question is discussed in the response to similar comments by mainland conservation groups on pages 60 and 61.

JOHN ALEXANDER (as typical of 25 letters from individuals with the same general comment endorsing the plan)

Comment: Express support for the wilderness proposal put forth by the National Park Service.

DRS. OTTO & ISA DEGENER

Comment: Modify the statement regarding facilities to control feral animals to read "feral animals and plants."

Response: Where used, the term feral animals is meant to define the problems and control techniques peculiar to animals, but not to imply a lack of concern regarding feral plants. A major objective of this park is to protect native ecosystems from both exotic animals and plants.

DR. KIMBALL S. ERDMAN

Comment: Include portions of the Kalapana Extension as wilderness. This portion of the enabling act of the park should be altered and the tract managed as a meaningful part of the park.

Response: The homesite provision is a fact of existing legislation. If, in the future, other Congressional acts nullify the provision, the Kalapana Extension lands could be considered for addition to the designated wilderness units.

Comment: Include the Hilina Pali Road corridor in wilderness.

Response: The alternative to obliterate the Hilina Pali Road and include this corridor in wilderness was considered and discarded. The road is a key access to areas of extensive goat control work, and provides visitor access to an excellent overlook and trailhead.

THOMAS F. HOROBK

Comment: I do not support the road extension or other developments.

Response: Developments, including roads, have been considered in this study and in more detail in the park master plan. It is proposed to re-connect the previously existing Chain of Craters Road, partially buried by Mauna Ulu lava flows; to close the jeep trail to Mauna Loa summit to public use; and to make no other changes in the general road patterns of the park.

Comment: Increased effort should be made to eliminate feral animals and plants wherever they are encountered.

Response: The park has a major program to control populations of feral animals and plants wherever feasible means to do so exist. Complete elimination of all exotic plants and animals is impossible within the context of control methods known at this time. These problems are discussed in greater detail in the final EIS on the natural resources management plan.

BRUCE A. JACOBSEN

Comment: Support Alternative D (Designate entire Chain of Craters and adjoining palis mauka as wilderness) and Alternative G (include Hilina Pali Road corridor in wilderness).

Response: There alternatives were seriously considered but discarded. The Chain of Craters Road reconstruction is proposed to give park visitors access to and interpretation of recent and active volcanism. The Hilina Pali Road is a key access route used in control of feral goats, and for visitor access to the overlook and trailhead.

Comment: Hualalai Summit and Saddle, Honaunau Forest, offshore waters, Kapapala Forest Reserve lands, and Kilauea Forest Reserve lands should be added to park wilderness.

Response: These areas lie outside the authorized boundaries of Hawaii Volcanoes National Park; this wilderness proposal deals only with the existing park lands.

RUSSELL K. LeBARRON

Comment: The statement in the draft EIS, "Several endemic species of birds and insects have become extinct within the park and elsewhere on the Island of Hawaii because of agricultural and forestry practices which disturb native habitat and introduce competitive animals" is not true.

Response: The statement (page 19) has been changed to delete the phrase agricultural and forestry practices.

MALCOLM H. MOSSMAN

Comment: Include in the plan provisions for the development of geothermal power.

Response: Geothermal leases may not be legally issued in National Park Service areas. The Geothermal Steam Act of 1970 (30 U.S.C. Section 1014c) states that, "Geothermal leases under this chapter shall not be issued for lands administered in accordance with (1) the Act of August 25, 1916 (39 Statute 535) as amended and supplemented. . ." Hawaii Volcanoes National Park is an area administered in accordance with this 1916 Act.



WILLIAM P. MULL

Comment: Strongly support the wilderness proposal, but it understates the uniqueness and potential value to mankind of these oceanic island ecosystems and their remarkable plant and animal components. The special provision for facilities to control feral animals should be recast as a Congressional directive rather than as a Congressional permit.

Response: The Natural Resources Management Plan EIS deals more fully with the unique biological values of Hawaii Volcanoes National Park. In this proposal, the special provision to facilitate the control of exotic animals is needed to protect vulnerable biological values that are typical of an isolated island ecosystem. Revision of this special provision to make it a Congressional mandate is discussed on pages 60 and 61.

APPENDIX

Comments Received

ADVISORY COUNCIL  
ON  
HISTORIC PRESERVATION  
WASHINGTON, D.C. 20540

FEB 8 1974

Mr. Howard H. Chapman  
Regional Director  
Western Regional Office  
National Park Service  
450 Golden Gate Avenue, Box 36063  
San Francisco, California 94102

Dear Mr. Chapman:

This is in response to your request of December 12, 1973, for comments on the draft environmental statement for the preliminary Wilderness Study for Hawaii Volcanoes National Park. Pursuant to its responsibilities under Section 102(2)(C) of the National Environmental Policy Act of 1969, the Advisory Council on Historic Preservation has determined that your draft environmental statement appears adequate regarding our area of expertise and we have no further comment to make.

Thank you for your cooperation.

Sincerely yours,



Ann Webster Smith  
Director, Office of Compliance

A-1

THE COUNCIL, an independent agency of the Executive Branch of the Federal Government, is chartered by the Act of October 13, 1949, with advising the President and Congress in the field of Historic Preservation, commenting on Federal, federally assisted, and federally licensed undertakings having an effect upon properties listed in the National Register of Historic Places, recommending measures to coordinate governmental with private activities, advising on the dissemination of information, encouraging public interest and participation, recommending the conduct of special studies, advising in the preparation of legislation, and encouraging specialized training and education, and guiding the United States membership in the International Center for the Study of the Preservation and the Restoration of Cultural Property in Rome, Italy.

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
Washington, D.C. 20250

Mr. Howard Chapman  
Regional Director, Western Region  
National Park Service  
Department of the Interior  
450 Golden Gate Avenue, Box 36063  
San Francisco, California 94102

Dear Mr. Chapman:

We appreciate the opportunity to review your preliminary proposal for Wilderness designation within Hawaii Volcanoes National Park.

The resources within Hawaii Volcanoes National Park seem generally well suited to Wilderness designation. We note, however, that you intend to recommend several exceptions to the provisions of the Wilderness Act of 1964. We do not believe these exceptions are advisable. They will tend to erode the meaningful distinction which a Wilderness designation brings to an area. We, therefore, recommend that you reconsider these exceptions.

Specifically, the exceptions we refer to are those imprints of man's work which are not necessary for management of the area as Wilderness. Unit 1 contains two cabins, Red Hill and Summit, which although used for ranger patrol are permitted for visitor use. Additionally, two more cabins or shelters are planned for the Mauna Loa Trail and Lua Poholo. We believe the justification for these shelters is weak. There is no indication in the Wilderness Act of 1964, or its legislative history, that shelters for protection from weather comport with the wilderness concept. We suggest that the portion of Unit 1 northward of the Mauna Loa Trail, to include the two cabins, two planned shelters, and the USGS road and observatory, be deleted from the proposal.

In Unit 2, we take exception to inclusion of the existing and proposed shelters. The justification for these shelters seems only that water-collecting facilities are going to be provided for visitors, so shelter may be built below the "rain-sheds." Providing water for development is far removed from the concept of wilderness preservation. Weather protection seems inadequate as justification, since it is not an "exception" in the Wilderness Act or its precepts. Also, the type of weather to be encountered at these lower elevation


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sites cannot be rationalized as dangerous. We recommend that the coastline sites not be developed or the coastal strip be left out of your recommendation for Wilderness designation. The shelter at Pepeiau should be removed or the nonwilderness accessway be extended to exclude this shelter.

We concur in the stated plans and measures needed to cope with feral animals. These are necessary to protect the wilderness resource, and are within the purview of the Act.

Sincerely,

FOR-----

  
JOHN R. MCGUIRE  
Chief



DEPARTMENT OF THE ARMY  
PACIFIC OCEAN DIVISION, CORPS OF ENGINEERS  
BUILDING 96, FORT ARMSTRONG  
HONOLULU, HAWAII 96813

PODED-P

26 February 1974

Mr. Fred J. Novak, Acting Regional Director  
National Park Service, Western Region  
U.S. Department of the Interior  
450 Golden Gate Avenue, Box 36063  
San Francisco, California 94102

Dear Mr. Novak:

Your letter L48 (WR) DWC of 7 December 1973 to the Chief of Engineers was referred to us for reply. We have reviewed the Draft Environmental Statement - Proposed Wilderness Areas Master and Management Plans, Hawaii Volcanoes National Park, Hawaii, and offer the following comments:


- a. An explanation of terms would be helpful to understand the concept of wilderness area and its intended state of preservation.
- b. Measures to mitigate construction damage within the wilderness boundaries and to preserve native animal and plant communities and individual species could be discussed.
- c. Discussion could be provided in the text which illustrates Federal costs to relocate campsites, to construct roads, water catchment systems and tanks, or to acquire land for the wilderness area.
- d. Discussion could be expanded to provide information on whose authority the wilderness area will be created, and what steps must be taken to have the decision approved.
- e. Recreational potential of the wilderness area is discussed, but no data is provided which would give an indication of how many persons will be using the park or how recreational benefits were computed. An explanation of how recreational benefits relate to the decision-making process would be helpful in illustrating the type of park utilization being considered, and how wilderness management will be organized to control recreational activities within wilderness boundaries.

PODED-P  
Mr. Fred J. Novak

26 February 1974

f. A discussion on the proposed plan's relationship to other Federal, State, and County land use ordinances and Coastal Zone Management programs could be provided.

Sincerely yours,



LEONARD EDELSTEIN  
Colonel, Corps of Engineers  
Deputy Division Engineer

Copies furnished:

Superintendent, Hawaii Volcanoes National Park, NPS, Hawaii 96718  
Office of Environmental Quality Control, State of Hawaii

STATEMENT BY MAJOR JAMES J. DORSEY,  
COMMANDER, KILAUEA MILITARY CAMP  
(Hilo Public Hearing 2/20/74)

Major Dorsey:

In general the position of the U. S. Army Support Command, Hawaii, is one of support for the Hawaii Volcanoes National Park Wilderness proposal. We do not have any alternatives to propose for wilderness. Thank you.





GENERAL COUNSEL OF THE  
DEPARTMENT OF COMMERCE  
Washington, D.C. 20230

MAR 11 1974

Mr. Fred J. Novak  
Acting Regional Director  
Western Region  
National Park Service  
Department of the Interior  
450 Golden Gate Avenue, Box 36063  
San Francisco, California 94102

Dear Mr. Novak:

The Department of Commerce has received your letter regarding the Master Plan for Hawaii Volcanoes National Park and the study proposing to designate a portion of Hawaii Volcanoes National Park as a wilderness pursuant to the Wilderness Act of September 3, 1974, (78 Statment 890 et. Seq). Our comments all focus on the unique observatory maintained by the Department's National Oceanic and Atmospheric Administration (NOAA) Mauna Loa and the unique air environment on Mauna Loa.

A. The Master Plan

page 9. Due to a unique air environment on Mauna Loa above the temperature inversion, this area enjoys unusually clean air. Reference to this phenomenon should appear in the section entitled "The Park and its Resources"

page 55. Reference is made to inclusion of "low standard roads" and later that these roads "...will be located predominately at the coast or at lower elevations..." We suggest that these roads be located exclusively along the coast and below 6500 feet above sea level. Such locations would insure that the temperature inversion could continue to act as a "barrier" or "filter" for the vehicle-produced pollution and minimize the effect on air sampling at the NOAA Observatory on Mauna Loa.

page 57. We recommend inclusion of the following statement:

"The operation of National Oceanic and Atmospheric Administration Mauna Loa Observatory constitutes a unique utilization of the special environment of the upper reaches of Mauna Loa. This 4.05 acre site located 11,150 feet above sea level permits access to one of the area's resources. Preservation of its clean air qualities will be emphasized."

page 57. The plan indicates that an additional trail connection will be made to the summit of Mauna Loa and the shelters thereon. Since the nighttime downslope flow to the NOAA Observatory is an extraordinarily clean air mass, the operation of petroleum fueled stoves or heating devices on the trail or in these shelters might create significant interferences. It is suggested therefore that the use of any petroleum-fueled device be prohibited at the back country shelters.

**B. The Wilderness Study**

page 7. The use of petroleum fuels at the Red Hill and Mauna Loa summit cabins should be prohibited.

page 11. Vehicular access to the upper slopes, specifically the summit of Mauna Loa, for research activity is properly recommended in the study; however, we suggest that measures be designed for controlling the road access. This would assist in preventing man-made pollution from interfering with the Observatory's function.

We also recommend that a "Special Provision" be made for the Observatory at page 11 of the Wilderness Study similar to the special provision for the Geological Survey weather research activities listed in the study.

Page 22. Provisions for structures, an access road and utility lines together with the necessary instruments, instrument platforms, and sampling masts required for the operation of the Observatory should be exempted from the

restriction of these sections. These requirements should be limited to those necessary to the NOAA scientific programs.

page 36. We suggest that the Mauna Loa Observatory be recognized in a manner similar to that done for Kilauea Military Camp.

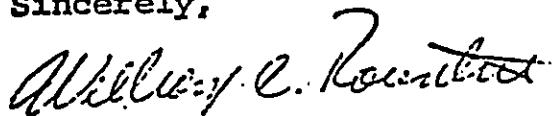
page 36. We recommend inclusion in the protection of the park ecosystems the recognition of the unique air environment of the upper slopes of Mauna Loa and a statement of the intent to protect this resource.

page 37. It is stated that there will be encouragement of the use of remote areas "including the summit and slopes of Mauna Loa." We suggest that such "encouragement" particularly at elevations above about 6000 to 8000 feet mean sea level is not compatible with the preservation of the air environment. Furthermore, construction of trails not only interferes during construction but the subsequent use can be damaging. Significant numbers of hikers represent a threat to the Observatory's functions. We strongly recommend that no new hiking trails be constructed and that access to the "slopes and summit" of Mauna Loa be possible but restricted so that the area will be allowed to stay as it is as long as possible.

page 43. Any additional road areas represent some deterioration of the "clean" air environment. However, the proposed road's effect would be minimal if the "Upper Terminus" is kept to the lowest elevation possible. In no event should this road rise above 6500 feet mean sea level.

Thank you for the opportunity to review and comment. Please advise this Department of the final disposition.

Sincerely,



Assistant General Counsel  
for Legislation



OFFICE OF THE ASSISTANT SECRETARY OF COMMERCE  
Washington, D.C. 20230

February 5, 1974

Mr. Fred J. Novak  
Acting Regional Director  
Western Region  
National Park Service  
Department of the Interior  
450 Golden Gate Avenue, Box 36063  
San Francisco, California 94102

Dear Mr. Novak:

Thank you for your letter of December 7, 1973, and the accompanying material for the Hawaii Volcanoes National Park. We appreciate your recognition of our vital interest in preserving the environment, especially and specifically the air environment, of Mauna Loa.

You are undoubtedly aware that the Mauna Loa Observatory of NOAA has the only long-term measurements of background man-made and natural trace contaminants on the planet Earth. These data have shown, unequivocally, the global increase in carbon dioxide due to the burning of fossil fuels. They also have been sufficiently free of local interference due to man's activity to identify variations in the year-to-year increase that require explanation through continued research.

There has been steadily increasing recognition of our lack of knowledge of the amount and fate of contaminants in our atmosphere and their effect on climate and man. The 1972 United Nations Conference on the Human Environment in Stockholm singled out the need for a global monitoring program for the atmosphere and ocean as one of its highest priority recommendations. The follow-on action of the United Nations Environmental Program has selected this activity as its first priority program.

The National Oceanic and Atmospheric Administration has responded to this global need by creating the Geophysical Monitoring for Climatic Change Program, a program to establish the U.S. share of the monitoring observatories required to document our air environment and must be located in "clean" environments protected from the works and activities of man. Mauna Loa Observatory with its history of completely unique data is the keystone of this Program. The Observatory location and its air environment is protected by meteorological and topographical factors including the persistent temperature inversion, the rugged and inhospitable terrain, and the designed absence of public roads.

Thus, we vigorously support your efforts to preserve the character and longevity of the Mauna Loa ecology and environment.

We have attached detailed comments on each of the four documents you provided.

To summarize we find that:

I. Alternative F. of the draft environmental statement, with extension of the boundary, northwest, north and northeast, of the Mauna Loa summit to a line running along the 8500 foot mean sea level contour would best protect the unique clean air environment.

II. The proposed Master Plan, again with the extension of the northern boundary to 8500 feet MSL, would permit continuation of NOAA's long-term clean air research. Under this alternative we request;

A. The Hualalai access road elevations be kept below 6500 feet mean sea level.

B. That no additional trails to the summit of Mauna Loa be constructed.

C. The unique research needs and activities of NOAA at the Mauna Loa Observatory be explicitly recognized (as for the U.S. Geological Survey).

- 3 -

D. That the required access to and logistics (power lines, etc.) for the Mauna Loa Observatory be exempted from the restrictions normally applied to Wilderness areas.

III. Alternative B. of the draft environmental statement is unacceptable to the Department. The construction of a road at the location and altitude proposed would essentially destroy Mauna Loa clean air environment and prevent the continuation of clean air research.

We are attaching detailed comments on both the proposed Master Plan, Hawaii Volcanoes National Park, Environmental Impact Statement and on the proposed Wilderness Areas, Environmental Impact Statement. We hope these comments will be of assistance to you.

Finally, we will ask the Director of Mauna Loa Observatory, Dr. R. Fegley to discuss our needs with your Hearings Officer and to attend the Hilo hearings.

Sincerely,



Sidney R. Galler  
Deputy Assistant Secretary  
for Environmental Affairs

Attachments

Comments on

Draft Environmental Statement  
Proposed Wilderness Areas

p. 1, par. 1 - We request lines 11-12 be changed to read: Further, volcanic research with facilities necessary throughout the park, and atmospheric research in the unique environment of the Mauna Loa summit area, are equal in importance to the conservation public/use aspects. (Additions underlined.)

p. 3 - We request insertion of a specific statement recognizing the atmospheric research conducted by NOAA's Mauna Loa Observatory. The following is the suggested text:

"Atmospheric research to determine global background levels of trace contaminants is also equal in importance to visitor use. It is proposed to continue NOAA's Mauna Loa Observatory (4.05 acres at 11,200 feet MSL). Included in this provision will be permission for continued road access, utility services and operation of physical/chemical measuring systems."

p. 3, Unit 1 - We suggest that the boundaries of the area be extended from the proposed (approximate) 10,000 foot MSL altitude downslope to the 8,500 foot MSL contour. This would better protect the clean air environment.

p. 6, 1st paragraph - We note in the last sentence the provision of a parking area "outside the current park boundaries and below the Mauna Loa weather observatory".

Since automobiles produce very large amounts of most of the trace materials NOAA is attempting to measure at very low concentrations, the close approach of vehicles can vitiate the clean air program. In recognition of this the Superintendent, Hawaii Volcanoes Park and the Director, Mauna Loa Observatory have provided for automobile access and parking as follows:

Week days - Mauna Loa Observatory access road is closed 300 meters upslope from the communications site ("Kulani Mauka) approximately 9 road miles from the Observatory.

Weekends - Mauna Loa Observatory access road is opened at the communication site but closed at a point 0.8 road miles below the Observatory (at approximately 10,000 feet MSL).

All parking is at or below the closed points on the road.

This arrangement provides an acceptable compromise between access to the grandeur of Mauna Loa and the need to preserve the clean air environment.

We request that this arrangement be continued and explicitly recognized in the Environmental Statement.

p. 29-32 - Research Programs. - There is no mention of the unique atmospheric sciences research carried out at NOAA's Mauna Loa Observatory by and for Federal, state, university and other organizations. We have commented on this omission in each of the other three documents relating to this proposal and in a transmittal letter.



We believe this unique activity should be specifically mentioned and its capability to function in a continued clean air environment preserved. We will, if desired, provide additional information and photographs of our activities. (We note the photograph on p. 46 of the Proposed Master Plan is outdated. Additional measurement facilities have been added together with more control on automobile traffic.)

p. 37 - Mitigating Measures . . . - We repeat our comment regarding the requirement to recognize the ongoing NOAA Observatory program and to make special provisions for continued road access and the utility services required for the modern physical/chemical measurement systems.

p. 40 - Adverse Impacts . . . , par. 4 - the statement made regarding the U.S. Geological Survey's research facilities also applies, but to a more restricted area, to the NOAA Observatory research program. NOAA's intrusion will, however, be limited to the amount necessary to accomplish its research mission.

p. 44-57 - Alternatives

Alternative A - This "status quo" alternative would require NOAA to seek other alternative administrative action through local, state or Federal agencies (zoning, etc.) to provide a means for the

long term preservation of the clean air environment. Elimination of the access road to Hualalai would remove a potential source of pollution.

Alternative B.- No significant impact on NOAA different from proposed plan.

Alternative C - Same as Alternative B.

Alternative D - Same as Alternative B.

Alternative E - They only difference from the NOAA viewpoint would be the reduction of developments in the remaining wilderness areas.

Alternative F - We believe the establishment of a jeep road corridor would seriously pollute the Mauna Loa clean air environment. We would find this alternative unacceptable.

Alternative G - No significant impact different from proposed plan.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,  
REGION IX  
100 CALIFORNIA STREET  
SAN FRANCISCO, CALIFORNIA 94111

Fred J. Novak, Acting Regional Director  
National Park Service - Western Region  
450 Golden Gate Avenue  
Box 36063  
San Francisco, CA 94102

JAN 11 1974

Dear Mr. Novak:

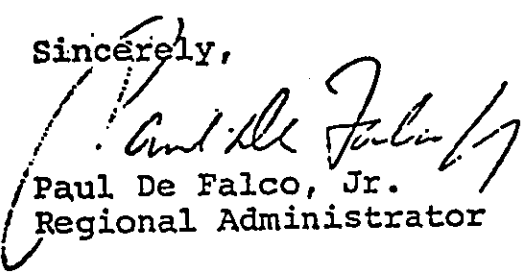
The Environmental Protection Agency has reviewed the draft environmental impact statement for the Proposed Master Plan for the Hawaii Volcanoes National Park. The statement was dated October 26, 1973, and reviewed by EPA on December 13, 1973.

Our comments on the draft statement have been classified as "LO-1", specifically lack of objections to the proposed action. The classification and the date of EPA's comments will be published in the Federal Register in accordance with our responsibility to inform the public of our views on proposed Federal actions under Section 309 of the Clean Air Act.

Definitions of the categories are provided on the enclosure. Our procedure is to categorize our comments on both the environmental consequences of the proposed action and the adequacy of the impact statement at the draft stage.

If you have any questions concerning our categorization procedures, please let us know.

Sincerely,

  
Paul De Falco, Jr.  
Regional Administrator

Enclosure

cc: Council on Environmental Quality, Wash., D.C. 20460  
Attn: Editor, 102 Monitor

Environmental Impact of the Action

LO--Lack of Objections

EPA has no objections to the proposed action as described in the draft impact statement; or suggests only minor changes in the proposed action.

ER--Environmental Reservations

EPA has reservations concerning the environmental effects of certain aspects of the proposed action. EPA believes that further study of suggested alternatives or modifications is required and has asked the originating Federal agency to reassess these aspects.

EU--Environmentally Unsatisfactory

EPA believes that the proposed action is unsatisfactory because of its potentially harmful effect on the environment. Furthermore, the Agency believes that the potential safeguards which might be utilized may not adequately protect the environment from hazards arising from this action. The Agency recommends that alternatives to the action be analyzed further (including the possibility of no action at all):

Adequacy of the Impact Statement

Category 1--Adequate

The draft impact statement adequately sets forth the environmental impact of the proposed project or action as well as alternatives reasonably available to the project or action.

Category 2--Insufficient Information

EPA believes that the draft impact statement does not contain sufficient information to assess fully the environmental impact of the proposed project or action. However, from the information submitted, the Agency is able to make a preliminary determination of the impact on the environment. EPA has requested that the originator provide the information that was not included in the draft statement.

Category 3--Inadequate

EPA believes that the draft impact statement does not adequately assess the environmental impact of the proposed project or action, or that the statement inadequately analyzes reasonably available alternatives. The Agency has requested more information and analysis concerning the potential environmental hazards and has asked that substantial revision be made to the impact statement.

If a draft impact statement is assigned a Category 3, no rating will be made of the project or action, since a basis does not generally exist on which to make such a determination.

FEDERAL POWER COMMISSION  
WASHINGTON, D.C. 20426

IN REPLY REFER TO:

JAN 31 1974

Mr. Fred J. Novak  
Acting Regional Director  
National Park Service  
450 Golden Gate Avenue  
Box 36063  
San Francisco, California 94102

Reference: L48  
(WR) DWC

Dear Mr. Novak:

This is in response to your letter of December 7, 1973, addressed to Chairman Nassikas, furnishing information and draft environmental statements on the master plan and wilderness proposals for Hawaii Volcanoes National Park.

As described in the material furnished, the proposed master plan would develop concepts and actions to guide further development and management of the existing 220,345-acre national park. The proposed master plan would also preserve about 124,000 acres of additional land under national park status. The areas proposed to be established as wilderness consist of four units, totaling 123,100 acres, within the existing park boundaries.

The staff of the Commission's Bureau of Power has reviewed the master plan and wilderness proposals to determine their effects on matters affecting the Commission's responsibilities. Such responsibilities relate to the development of hydroelectric power and assurance of the reliability and adequacy of electric service under the Federal Power Act, and the construction and operation of natural gas pipelines under the Natural Gas Act.

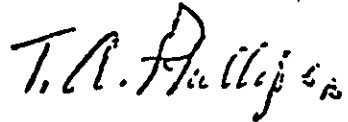
The staff review indicates that the master plan and wilderness proposals would not affect any existing electric power or natural gas facilities under the jurisdiction of the Federal Power Commission and would not appear to have any

Mr. Fred J. Novak

-2-

effect on the future development of supplies and transmission  
of electric power or natural gas.

Very truly yours,

A handwritten signature in cursive script, reading "T. A. Phillips".

T. A. Phillips  
Chief, Bureau of Power

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
Bishop Trust Building, 10th Floor  
1000 Bishop Street  
Honolulu, Hawaii 96813

February 22, 1974

Hearings Officer  
c/o Superintendent  
Hawaii Volcanoes National Park  
Hawaii National Park, Hawaii 96718

Gentlemen:

Subject: Draft Environmental Statements  
Proposed Master Plan & Proposed Wilderness Areas  
Hawaii Volcanoes National Park, Hawaii

The proposed action covered by the captioned documents involves modifications to an existing national park plan to accommodate the addition of a large wilderness area and several smaller modifications. The presentation also discusses a number of alternatives.

The comments set forth in the succeeding paragraphs reflect the Department of Housing and Urban Development's interest and involvement in community development planning and programming.

The concept of a multi-purpose facility providing opportunities for environmental preservation, various research activities and both passive and active recreation is an eminently desirable element of a community development plan. The proposed master plan exhibits these characteristics to a notable degree. Further, the proposed additions do not appear to have any significantly adverse impact on the surrounding environment. Rather, the opposite would seem to be the case, particularly with respect to the proposed release of tracts 19 and 20 to potential urban development.

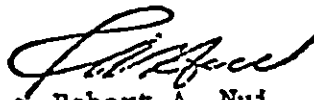
The Statements are well presented and appear to cover most of the important points. However, there are some areas I believe can be clarified.

1. Since the Federal Government is precluded from purchasing the land with its own funds, how will private lands be acquired for addition to the Park? If this is to be accomplished by donations, have the private land owners indicated a willingness to do so? If by State or local government through condemnation, has either so indicated?

2. The manner in which the alternatives are presented indicate varying degrees of viability. Since the proposed Master Plan is the thing sought, the alternatives could be compared more directly with the Plan to show why the Plan is more desirable. It is also conceivable that some of the alternatives could be comfortably accommodated within the Plan, e.g., alternative L, designation of a parcel of land for Hawaiian homesteads but with controls designed to minimize impactation. Similar concepts are being discussed in connection with the Kahana Valley Park on Oahu.
3. Neither the text nor the maps refer to existing County of Hawaii parks in the Kalapana area. One is the Harry K. Brown park and the other is the Kaimu Beach Park in which HUD has participated. Does the proposed Plan include any of these areas? If so, will the Plan control the uses to which those areas can be put? What would the social impact be?

We have benefitted from the opportunity to review these documents. The existing Hawaii Volcanoes National Park is an asset not only to the State, but to the national community. Its preservation and enhancement is eminently desirable.

Sincerely,



Robert A. Nui  
Program Manager





## United States Department of the Interior

OFFICE OF THE SECRETARY  
WASHINGTON, D.C. 20240

In Reply Refer To:  
EBM-MRED-MS  
D-580

FEAR 27 1974

Dear Mr. Novak:

Thank you for the packet containing the draft master plan, the preliminary wilderness study and the accompanying draft environmental statements for Hawaii Volcanoes National Park.

Your studies are comprehensive and thorough in analyzing future use, care, and betterment of the park. Long range plans propose acquisition of more than 100,000 acres of new lands, control of exotic animal and plant species, and expansion of visitor opportunities. To accomplish your plans, both legislative and administrative actions will be required. We are pleased to see that the master plan provides under proposed wilderness the special use of helicopters and motor vehicles that would permit the Geological Survey to carry on its important research.

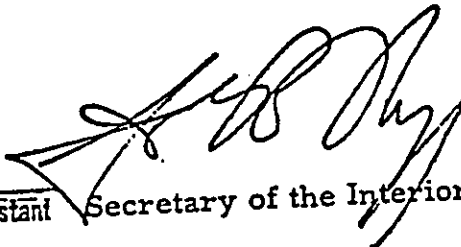
We noted that the environmental statement for the master plan does not consider the potential for geothermal energy that should exist in the area of the park. According to the Center for Engineering Research of the University of Hawaii, the County of Hawaii, outside of present national park boundaries, contains several regions with possible geothermal potential. These sites include the Puna rift, Kapoho, the northwest rift of Hualalai, the southwest rift of Mauna Loa, and the east rift of Mauna Kea. The development of the Hualalai site seems to be the most feasible at the present time since it is relatively quiet. The proposed expansion of the park may include some of these sites, particularly the Hualalai site.

Currently, Hawaii depends almost exclusively on the combustion of fossil fuels for its electrical energy. Because these fuels must be imported and in some cases refined locally, Hawaii's electric rates are among the highest in

Ltr. to Mr. Fred J. Novak, Acting Regional Director, National Park Service,  
San Francisco, California, Subj: Hawaii Volcanoes National Park

the Nation. The studies and the environmental statements should consider  
this important natural resource and how its possible utilization and your  
proposed planning might each affect the other.

Sincerely yours,

  
Deputy Assistant Secretary of the Interior

Mr. Fred J. Novak  
Acting Regional Director  
Western Region  
National Park Service  
450 Golden Gate Avenue  
Box 36063  
San Francisco, California 94102



IN REPLY REFER TO:  
148  
(WR)DWC

# United States Department of the Interior

## NATIONAL PARK SERVICE

### WESTERN REGION

450 GOLDEN GATE AVENUE, BOX 36063  
SAN FRANCISCO, CALIFORNIA 94102

December 7, 1973

Mr. Burton W. Silcock  
Director, Bureau of Land Management  
Department of the Interior  
Washington, D. C. 20240

Dear Mr. Silcock:

We are pleased to enclose a packet containing the preliminary wilderness study and draft master plan for Hawaii Volcanoes National Park and a draft environmental impact statement for each of the documents. We invite your review of, and comments on this material.

In accordance with the Wilderness Act of 1964, public hearings on the wilderness proposal will be held February 20, Aloha Room, Hilo Lagoon Hotel, 101 Aupuni Street, Hilo, Hawaii, from 1 to 5 p.m. and from 7 p.m. until conclusion; February 23, Yano Memorial Hall, Captain Cook, Kona, Hawaii, from 9 a.m. to noon and from 1 to 5 p.m.; and, February 26, second floor conference room, Gold Bond Building, 677 Ala Moana Boulevard, Honolulu, from 1 to 5 p.m. and from 7 p.m. until everyone who wishes to speak has been given an opportunity to do so. We would be pleased to receive your views on the proposal to establish four wilderness areas within Hawaii Volcanoes National Park in person at any of these public hearings, or, if you prefer, you may send written comments to the Hearings Officer, c/o Superintendent, Hawaii Volcanoes National Park, Hawaii 96718. Written comments will be accepted until March 28, 1974.

Public meetings on the draft master plan for the park will be held on alternate days at the same sites. They will be held February 19, at the Hilo location, 1 to 5 p.m. and from 7 p.m. to conclusion; February 22 at the Kona location, 1 to 5 p.m. and from 7 p.m. to conclusion; and February 25, at the Honolulu location, 1 to 5 p.m. and 7 p.m. until all who wish to speak have been heard.

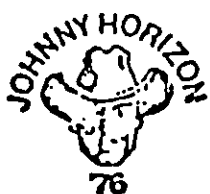
If you wish to appear, or to have someone represent you in person at a wilderness hearing or master plan meeting, please notify the Hearings Officer, c/o Superintendent, Hawaii Volcanoes National Park, Hawaii.

With kindest regards.

Sincerely yours,

Fred J. Novak  
Acting Regional Director  
Western Region

Enclosure



12/12/73

*We have no comments*

Let's Clean Up America For Our 200th Birthday

A-25

*DAN*



United States Department of the Interior FEB 25 REC'D

BUREAU OF MINES  
WASHINGTON, D.C. 20240

In Reply Refer To:  
EBM-NRED-MS  
D-523

February 19, 1974

Mr. Fred J. Novak  
Acting Regional Director  
National Park Service  
Western Region  
450 Golden Gate Avenue, Box 36063  
San Francisco, California 94102

Dear Mr. Novak:

We have reviewed the proposed Master Plan, Wilderness Study, and the accompanying draft environmental statements for Hawaii Volcanoes National Park. We believe your studies and their draft statements to be comprehensive and thorough in analyzing the future use, care, and betterment of the park. Your long-range plan proposes acquisition of more than 100,000 acres of new lands, control of exotic animal and plant species, and expansion of visitor opportunities. Both legislative and administrative actions are required to accomplish parts of your plan.

Your wilderness proposal would classify 123,000 acres as wilderness under provisions that would permit special use of helicopters and limited use of motor vehicles to carry on the research of the U.S. Geological Survey. We can see reason in the need for these special provisions.

The environmental statement for the Master Plan states that the only mineral resource in the park is building stone and that it is readily available throughout the island. However, one resource that the statement neglects to discuss is geothermal potential. Although no sites in Hawaii are included in the Geological Survey's list of Known Geothermal Resources Areas, there is a substantial potential in the Hawaiian Islands.

According to the Center for Engineering Research of the University of Hawaii, the County of Hawaii, outside of present national park boundaries, contains several regions with possible geothermal potential. These sites include the Puna rift, Kapoho, the northwest rift of Hualalai, the southwest rift of Mauna Loa, and the east rift of Mauna Kea. The development of the Hualalai site seems to be the most feasible at the present time since it is relatively quiet. The proposed expansion of the park may include some of these sites, particularly the Hualalai site.

Ltr. to Mr. Fred J. Novak, Acting Regional Director, National Park Service,  
Western Region, 450 Golden Gate Avenue, Box 36063, San Francisco,  
California, Subj: Hawaii Volcanoes National Park

Currently, Hawaii depends almost exclusively on the combustion of fossil fuels for its electrical energy. Because these fuels must be imported and in some cases refined locally, Hawaii's electric rates are among the highest in the Nation. The studies and their environmental statements should consider this important natural resource and how its possible utilization and your proposed planning might each affect the other.

Sincerely yours,

Assistant

Director



IN REPLY REFER TO:  
D72

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF OUTDOOR RECREATION

PACIFIC SOUTHWEST REGIONAL OFFICE

BOX 36062

450 GOLDEN GATE AVENUE  
SAN FRANCISCO, CALIFORNIA 94102

March 11, 1974

Memorandum.

To: Superintendent, Hawaii Volcanoes National Park  
Attention: Hearings Officer

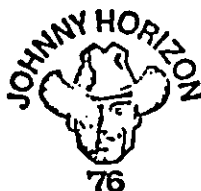
From: Regional Director

Subject: Review of Master Plan and Wilderness Study, and the  
October 26, 1973 draft Environmental Impact Statements  
for the Master Plan (DES 73-66) and the Wilderness  
Study (DES 73-68), Hawaii Volcanoes National Park,  
State of Hawaii

We have reviewed the four subject documents transmitted by Acting  
Regional Director Fred J. Novak's December 7, 1973 letter.

We have no comments on the EIS's. We are in accord with the Master  
Plan and Wilderness Study and appreciate the opportunity to review and  
comment on them.

  
Frank E. Sylvestre



A-28

Lets Clean Up America For Our 200th Birthday



# United States Department of the Interior

BUREAU OF RECLAMATION  
WASHINGTON, D.C. 20240

**FEB 25 1974**

IN REPLY  
REFER TO: 739  
125.

## Memorandum

To: Regional Director, Western Region  
National Park Service, San Francisco, California

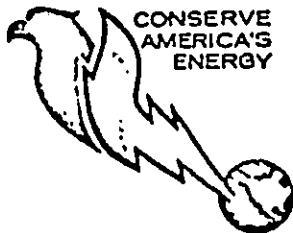
From: Commissioner of Reclamation

Subject: Review of Draft Environmental Statement for the Wilderness  
Study and the Proposed Resources Management Plan at Hawaii  
Volcanoes National Park, Hawaii (DES 73-66, 67, and 68)

This responds to your December 7, 1973, letter and the January 4, 1974,  
letter from the Superintendent, Hawaii Volcanoes National Park, Hawaii,  
requesting a review of subject environmental statements.

Although we have no specific comments, we concur with the aims and  
methods set forth by the National Park Service to attain its goals.

cc:  
Superintendent, Hawaii Volcanoes National Park  
Director, National Park Service



A-29

*Save Energy and You Serve America!*



# United States Department of the Interior

GEOLOGICAL SURVEY  
RESTON, VIRGINIA 22092

OFFICE OF THE DIRECTOR

DES 73-68

MAY 28 1974

## Memorandum

To: Regional Director, Western Region, National Park Service,  
San Francisco, California

Through: <sup>Acting Deputy</sup> Assistant Secretary--Energy and Minerals *T. Welo*  
MAY 29 1974

From: Director, Geological Survey

Subject: Review of draft environmental statement, preliminary wilderness study, and draft master plan for Hawaii Volcanoes National Park

We appreciate the opportunity to comment upon these documents because much of the land being proposed for wilderness includes areas where research on volcanic processes is underway by the Geological Survey. The importance of this research must be stressed and, if the wilderness proposal is approved, the safety and welfare of the island must be safeguarded by the special provisions allowing motorized access for research and for the installation of instruments that might otherwise be incompatible with wilderness status. Both of the subject documents do recognize this through the inclusion of a special provision that volcano research be allowed to continue, that helicopter access for transportation and servicing of instruments be permitted, and that the existing jeep road to the summit of Mauna Loa be permitted to remain for vehicular access. We wholeheartedly endorse this special provision.

We have learned that The Wilderness Society is opposed to this and other special provisions, as briefly outlined on their flyer. We must take vigorous exception to their opposition, because without special provision, the language of the Wilderness Act could not only be interpreted to require reduction or elimination of the existing research program, but would almost certainly be interpreted in a way that would prevent improvement or expansion of the program. The following discussion briefly recounts the development of the research program, the necessity of its continuation; and the importance of its ability to be modified to meet changing conditions of volcanic activity.



Occasional recorded observations of Hawaiian volcanoes began in the 1820's and sporadic scientific studies began in the 1840's, but it was not until 1912, when the Hawaiian Volcano Observatory was established, that systematic scientific studies were carried out. The impact that the studies by the observatory have had on the understanding of volcanoes has been enormous. More than 280 papers have been published by scientists associated with the observatory, and these papers comprise a substantial fraction of existing worldwide knowledge on volcanoes in general. Scientists generally recognize the Hawaiian Volcano Observatory as the leading facility of its type anywhere in the world. Many different factors have contributed to the achievement of this status, but among the most important have been the frequent and often continuous eruptions and the relatively easy access to the eruptions, wherever they occurred, for scientific study. As technology advanced, new tools for study became available, and the frequent eruptions from widely different sites enabled the most advanced techniques to be used in learning more about the behavior of the volcanoes and mechanisms underlying their activity. While much has been learned, much more remains to be learned, and the Geological Survey places a high priority on continuing its program of scientific research at the volcano observatory.

New techniques for study are constantly being developed and improved, and the program of study today is vastly improved over what it was even fifteen years ago. With little doubt, the next fifteen years will see equivalent improvements, and some of the potential improvements may not even be visualized at present. To enable the accomplishments of the past to be made, it has been essential for studies to be carried out at whatever sites were deemed appropriate. For future studies to be effective, this same access to appropriate sites is vital. The localities of eruptive vents, wherever they might be, must be included as essential sites for study. Many eruptions within historic times, including several within the past few years, have originated within the proposed Wilderness Units 1, 2, and 3 of Hawaii Volcanoes National Park, and without doubt additional eruptions will occur within these areas in the future. We therefore urge that provisions for access to all appropriate areas for research purposes be an essential part of any wilderness legislation.

Because of constantly changing volcanic conditions, it is not possible to anticipate what particular areas might be involved in future activity, and therefore the provisions for access must be general enough to include any eruptive site whatsoever.

We must point out that the volcano research is essential, not merely for its own sake, but more importantly for the welfare and safety of the residents and visitors on the island. The direct, practical application of the research program is a continual monitor of the existing state of the volcanoes and a constant evaluation of the possibility of any immediate drastic changes in behavior. Happily, most recent activity has been mild and has been confined to uninhabitated areas. It is important to realize, however, that every square foot of land on Hawaii is the product of volcanic activity, that Kilauea, Mauna Loa and Maunaloa are active volcanoes and are still growing, and that much of the land area of the island will inevitably be covered by future lava flows. It is vital for the population of the island to know as much as possible about changing trends of volcanic activity. For example, four times within recorded history the city of Hilo has been threatened by advancing lava flows. Every one of these flows originated within proposed Wilderness Unit 1. If wilderness designation denies modern types of access and installation of instruments required for scientific study, the human consequences could be dire.

It has already been mentioned that most Hawaiian volcanic activity is mild. Twice within the past 200 years, however, violent explosive eruptions have occurred, and the geologic record of the island shows that many other explosive eruptions have occurred in the geologic past. In 1790, prior to the time of scientific study, the explosive eruptions killed many people. In 1924, after systematic surveillance had been established, warnings protected the population. The only person killed in the 1924 eruption deliberately ignored specific personal warnings. In the future, if conditions again develop that indicate possible explosive conditions are developing, it will be vital to employ every possible method of study at whatever localities are deemed necessary. It could be disastrous if access or installations were denied because of wilderness restrictions.

We think these matters are of sufficient importance to the general welfare that their continuance must be very specifically recognized in any legislation establishing a Hawaiian Wilderness. Helicopter access and judicious use of surface vehicles should be allowed, and modifications and expansion of research facilities should be specifically permitted. These kinds of activities are not serious intrusions into the wilderness environment, and present and future installations are and would be relatively small and inconspicuous. Nonetheless the equipment itself and periodic access to stations, by some interpretations, would be contrary to wilderness conditions. The Wilderness Society's flyer states, "The Wilderness Act is sufficiently broad and flexible to allow them without special language." Unfortunately, this very broadness and flexibility

might also be interpreted to prohibit nonconforming activities. Therefore we urge the retention of the special provisions, and would be willing to make further recommendations on factors to be included in the special provisions.

In light of all these factors, we would favor Alternative A--no wilderness designation--if this were deemed a suitable decision. We would vigorously oppose Alternatives B, C, D, F, and G. Adoption of any of the latter alternatives would place intolerable restrictions on research already in progress.

We do not wish to be regarded as opponents to the legal establishment of a wilderness in Hawaii. Our scientists who have lived and worked in that region appreciate more fully than most people the splendid qualities of the Hawaiian back country, and they conduct their work in such a way as to preserve these qualities as nearly as possible. Through the years they have maintained a close working liaison with the Park Service to assure that the scientific work would cause a minimum of intrusion on the natural scene. We recognize that the Park Service is already doing a truly admirable job of protecting the wild state of these areas. Therefore, if in consideration of our research activities, the provisions specifically permitting our research cannot be included in legislation for Hawaii Wilderness, then we would recommend that the Wilderness not be established. Exclusion of the region from wilderness would not mean a change in its present qualities. It would merely mean that decisions and actions regarding the effect of the volcanoes on public safety can continue to be made promptly and efficiently, and that growth of knowledge on the causes and mechanism of Hawaiian volcanoes will not be impeded by self-constructed barriers.

We are sure that a suitable course for the future of the lands in question can be selected that will include both preservation of their wilderness qualities and progress of vital research on volcanoes.

With respect to water resources of the proposed wilderness area, we offer the following comments.

As pointed out in all the documents, even with heavy rainfall in parts of the area, there are no running streams within the park and the water table is only a few feet above mean sea level. Large pumping lifts would be required to make the water available at desired locations. Water for domestic use is generally collected from extensive rain sheds, and is presently inadequate during periods of extended below-normal rainfall.

The only feasible method to meet further increases in demand for water seems to be an expansion of the present method of water catchments and storage systems. The effects of the expansion upon the environment should be considered in the environmental statement.

We thank you for the opportunity to review and comment on the proposal and draft environmental statement for Hawaii Volcanoes National Park.

Acting

Director

*Henry W. Celler*



# United States Department of the Interior

BUREAU OF INDIAN AFFAIRS  
WASHINGTON, D. C. 20245

IN REPLY REFER TO:  
Trust Facilitation  
EQ (DES 73/66 & DES 73/68)

APR 11 1975

## Memorandum

To: Regional Director, Western Region  
National Park Service  
San Francisco, California

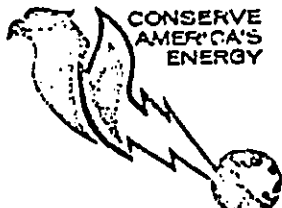
From: Director, Office of Trust Responsibilities

Subject: Review of Draft Environmental Statements, Hawaii Volcanoes  
National Park, Proposed Master Plan (DES 73/66) and Proposed  
Wilderness Areas (DES 73/68)

We have reviewed the subject statements. Since the BIA has no trust responsibilities in the affected area, we have no jurisdictional comments.

We do have some comments under expertise. We are concerned mainly with the proposed "Wilderness Threshold Zone" and "Back-Country Zone" and with the wilderness areas proposal and alternatives. The basic problem in this kind of a situation is: (1) How to minimize damage to unique natural resources; and (2) How to maximize human enjoyment of these resources. Autos and campers are heavy polluters. These are encouraged under the proposed plans - even though eventual rationing is foreseen in use of the wilderness areas.

A rather strong list of adverse impacts is presented (pages 40-41 of DES 73/68). We would like to submit another alternative which would avoid most of these and come closer to a minimum damage-maximum enjoyment solution. The suggested alternative is a system of secondary roads for park vehicles only, joined by a system of foot trails for day hikers only. The park vehicles here include small busses carrying hikers to trail heads as well as non-hiker sightseers. We believe this system will let more people see more of the park and with less damage than the proposed system.



A-35

*Save Energy and You Serve America!*

It also appears to fit the particular circumstances of short travel distance for visitors, relatively small back country areas, and the peculiar research and control problems of Hawaii Volcanoes National Park.

*Martin E. Smea Jr.*

COPY

COPY



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
1500 N.E. IRVING STREET  
P.O. BOX 3737  
PORTLAND, OREGON 97208

Reference: RBS

May 21, 1975

To: Regional Director, National Park Service, San Francisco, California  
From: Acting Regional Director, Fish and Wildlife Service, Portland, Oregon  
Subject: Draft Environmental statement for Proposed Wilderness Area Hawaii  
Volcanoes National Park, Hawaii (DES 73-68)

We have carefully reviewed subject and it adequately covers matters within our jurisdiction and expertise. The proposed wilderness area will assure continuity of native habitat essential for continued survival of some of Hawaii's endangered species as listed in the Department of the Interior's United States List of Endangered Fauna, May 1974. Our staff members stationed in Hawaii accomplished the review and concluded the project would benefit fish and wildlife.

We apologize for the delay in responding to your request for memo. Absence of staff from duty station and other prior commitments were largely responsible for the response lag.

(Signed) Donald J. Hankla

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Let's Clean Up America For Our 200th Birthday  
A-37

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION-REGION ~~SEVEN~~ Nine

ARIZONA  
CALIFORNIA  
HAWAII  
NEVADA

450 Golden Gate Avenue, Box 36096, San Francisco, Calif. 94102

March 27, 1974

IN REPLY REFER TO:  
9ED



Hearings Officer  
c/o Superintendent  
Hawaii Volcanoes National Park  
Hawaii 96718

Dear Sir:

We have reviewed the Draft Environmental Impact Statements for the proposed Master Plan (DES 73-66) and the proposed Wilderness Areas (DES 73-68), Hawaii Volcanoes National Park, Hawaii, and offer the following comments for your consideration.

1. Proposed Master Plan

a. Page 15, paragraph 2. Reconstruction of the Chain of Craters Road is presently programmed in Stage 1 for emergency relief funds under Hawaii Project ERF0-2(1). However, the corridor location, extent of reconstruction, and scheduling of this project are indeterminate at this time, due to the highly unstable volcanic activity within the project area.

b. Page 19, last paragraph. The Hawaii Highways Division recently completed safety improvements consisting of curve and shoulder widening on certain sections of State Route 11 within Hawaii Volcanoes National Park boundaries. At present, the State of Hawaii has no future plans to upgrade other portions of SR 11 within the Park; however, during November 1972, FHWA completed an engineering estimate for the National Park Service Development/Study Package Proposal No. 106 for the reconstruction of approximately 6.4 miles of existing Mamalahoa Highway in the vicinity of Kilauea.

c. Page 23, first paragraph. The Chain of Craters Road was first damaged in the vicinity of the Muna Ulu Summit during February, 1969. Subsequently, numerous volcanic eruptions have resulted in additional miles of the Chain of Craters Road being inundated with new lava. At the present time, the Chain of Craters Road, between the Muna Ulu Summit and the foot of Holei Pali, has been destroyed.



d. Page 79, Alternate B. The western terminus of the proposed parkway appears to join Federal-aid Secondary Route 160 in the vicinity of the City of Refuge entrance. This terminus should be coordinated with Hawaii County Federal-aid Secondary Project S-0160(5) which is presently in design.

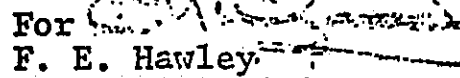
e. Page 91, Alternate H - No Reconstruction of Chain of Craters Road. Should this alternate be selected in the approved Master Plan for Hawaii Volcanoes National Park, the currently programmed project ERF0-2(1) should be withdrawn.

## 2. Proposed Wilderness Areas

Page 50, Alternate D - Designation of the Entire Chain of Craters and Adjacent Palis Mauka as Wilderness. Should this alternative be selected in the approved Wilderness Area designation, the programmed project ERF0-2(1) for the reconstruction of the Chain of Craters Road should be withdrawn.

We appreciate this opportunity to review the subject Draft EIS and would like to receive two copies of the Final Statement when it becomes available.

Sincerely yours,

  
For  
F. E. Hawley  
Regional Administrator

JOHN L. McCLELLAN, ARK., CHAIRMAN  
 WARREN G. MAGNUSON, WASH. MILTON R. YOUNG, N. DAK.  
 JOHN C. STENNIS, MISS. ROMAN L. Hruska, KANS.  
 JOHN O. EASTON, R.I. MORRIS COTTON, N.H.  
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 ROBERT C. BYRD, W. VA. HIRAM L. FONG, HAWAII  
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 MIKE MANFIELD, MONT. MARK O. MATFIELD, OREG.  
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 BIRCH BAYM, IND.  
 THOMAS F. EAGLETON, MO.  
 LAWTON CHILES, FLA.

THOMAS J. SCOTT, CHIEF CLERK  
 JAMES R. CALLOWAY, COUNSEL

## United States Senate

COMMITTEE ON APPROPRIATIONS  
 WASHINGTON, D.C. 20510

December 18, 1973

Mr. Howard H. Chapman  
 Regional Director  
 National Park Service  
 450 Golden Gate Avenue, Box 36063  
 San Francisco, California 94102

Dear Mr. Chapman:

I appreciate very much your sending me a packet containing the preliminary wilderness study and draft master plan for Hawaii Volcanoes National Park and an environmental impact statement for each of the documents.

I appreciate also being invited to participate in the public meetings and to submit written comments.

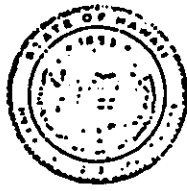
Please be assured that I shall follow these matters with a great deal of interest, and shall welcome any additional information which may be forthcoming.

With aloha,

Sincerely yours,

  
 Hiram L. Fong

HLF:lnk



EXECUTIVE CHAMBERS  
HONOLULU

JOHN A. BURNS  
GOVERNOR

December 31, 1973

Mr. Howard H. Chapman, Director  
Western Region National Park Service  
450 Golden Gate Avenue  
P. O. Box 36063  
San Francisco, California 94102

Dear Mr. Chapman:

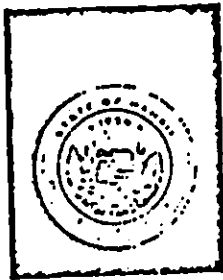
I would like to thank you on behalf of Governor Burns who is recuperating from surgery, for providing copies of the wilderness study and master plan for Hawaii Volcanoes National Park.

I have asked the Department of Land and Natural Resources to review the materials and to provide a response when the public hearings are held in February.

With warm personal regards, I remain,

Yours very truly,

  
George R. Ariyoshi  
Acting Governor



STATE OF  
HAWAII

DEPARTMENT OF PLANNING  
AND ECONOMIC DEVELOPMENT

P. O. BOX 2159 • HONOLULU, HAWAII 96804

December 26, 1973

JOHN A. BURNS  
Governor

SHELLEY M. MARK  
Director

EDWARD J. GREANEY, JR.  
Deputy Director

Ref. No. 0171

Mr. Robert Barrel  
State Director  
National Park Service  
677 Ala Moana Boulevard  
Honolulu, Hawaii 96813

Dear Mr. Barrel:-

We have reviewed the draft Master Plan and the preliminary Wilderness Proposal for Hawaii Volcanoes National Park, and the Environmental Impact Statement for each of the proposals.

We find that the Master Plan and the Wilderness Proposal are in accord with the goals of the State General Plan.

The draft Environmental Impact Statement for each of the proposals is generally adequate in its coverage of environmental issues. The evaluation of alternatives appears to be well-considered.

The appropriate State and County agencies have been contacted and they have acknowledged receipt of the proposals from your office. These agencies have indicated that they will send their review comments directly to you and a copy to us. It is our understanding that the record of the hearings and meetings on the proposals will be kept open until March 28, 1974, and written comments will be accepted until that date. Accordingly, our final clearinghouse review comments will be transmitted to your office prior to this date.

Thank you for allowing us the opportunity to review the documents.

Sincerely,

*E. J. Greaney, Jr.*  
(SHELLEY M. MARK)

JOHN A. BURNS  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
DIVISION OF STATE PARKS  
P. O. BOX 621  
HONOLULU, HAWAII, 96809

DIVISIONS:  
CONVEYANCES  
FISH AND GAME  
FORESTRY  
LAND MANAGEMENT  
STATE PARKS  
WATER AND LAND DEVELOPMENT

October 16, 1973.

Robert L. Barrel, State Director  
National Park Service  
U. S. Department of the Interior  
677 Ala Moana Boulevard, Suite 512  
Honolulu, HI 96813

Dear Mr. Barrel:

A review has been made of the Hawaii Volcanoes Master Plan and its Draft Environmental Impact Statement, as well as the Draft Environmental Impact Statement for the proposed wilderness areas.

The only historical place known to be affected by these plans that is not within the present Park boundaries is Ahu A Umi heiau on the slopes of Hualalai. Ahu A Umi heiau was processed under the statewide inventory program and has been placed on the Hawaii Register of Historic Places as a valuable site. It was also nominated to the National Register by the Review Board on April 9, 1973, but the paperwork has not been forwarded to the National Register as yet.

The major known historical places within existing Park boundaries have been processed by the National Park Service under PEO 11593, and have been submitted to the Hawaii Historic Places Review Board for their consideration before I review them as State Historic Preservation Officer.

This plan and the Impact Statements adequately consider the requirements of historic preservation for those sites known to be of National Register quality, as well as those which are of lesser value. Pending review of the final plans for projects in the various site areas, in my opinion there will be no adverse effect upon known historical sites by the projects proposed by the National Park Service.

Robert L. Barrel

-2-

October 16, 1973

The historical staff indicates that problems of clarity and accuracy exist with the descriptive sections on archaeology and history, particularly with the Master Plan and its Impact Statement. The descriptive material in the Wilderness Areas Environmental Impact Statement is much clearer and accurate. It is suggested that consideration be given to rewriting these sections of the Master Plan and its Impact Statement, or instead, substitute the material in the Wilderness Area's Statement before releasing them for public review.

Very truly yours,

BOARD OF LAND AND NATURAL RESOURCES



SUNAO KIDO  
Chairman and Member



OFFICE OF THE MAYOR — county of hawaii, hilo, hawaii 96720

SHUNICHI KIMURA  
MAYOR

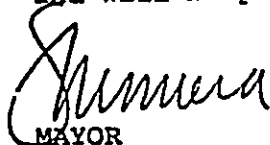
February 19, 1974

Hearing Officer  
c/o Superintendent  
Hawaii Volcanoes National Park  
Hawaii National Park, HI 96718

RE: HAWAII VOLCANOES MASTER PLAN/WILDERNESS STUDY

We are presently reviewing the above mentioned proposals in light of the County's economic/conservation/recreation/scientific policies and will shortly submit our position statement on the issues at hand.

We appreciate the opportunity to review the proposals and will keep you informed on our review.

  
MAYOR

SK:fy



COUNTY OF  
HAWAII

## PLANNING DEPARTMENT

25 AUPUNI STREET • HILO, HAWAII 96720

SHUNICHI KIMURA  
Mayor

RAYMOND H. SUEFUJI  
Director

February 11, 1974

Hawaii Volcanoes National Park  
Hawaii National Park  
Hawaii 96718

Re: Wilderness Proposal EIS

We have the following comments to offer on the subject EIS.

1. There should be clearly stated boundary lines for those units being proposed, in compliance with administrative policies of the National Park Service.
2. A discussion of the permitted activities within the wilderness area would be helpful. Part of the proposal's confusion relative to fishing stems from vague implications.
3. We do not feel that any of the alternatives listed are suitable. Alternative A, that of no wilderness designations while leaving the National Parks in much of a status quo condition, would not preclude the development of back-country zones for easier access and sophisticated camp shelters; hence increase the danger of damage to exotic species. Alternative E is not suitable for the same reason.

Alternatives B, D, F, would be unacceptable as they would limit volcanic research in these areas.

Much of the area's uniqueness stems from the accessibility of volcanic activity to scientists. While research within wilderness areas are permitted under National Park guidelines, vehicular access would not be. This condition would be prohibitive from the standpoint of safety.

Alternatives C and D include lands which are presently available for Hawaiian homesteading. Inclusion within the wilderness park would mean that the homesteading clause would have to be repealed.

4. Page 32 states that there will be little or no increase in the cost of archaeological research and that most of the



February 11, 1974

significant archaeological sites are in the Kalapana extension. This is not entirely the case. There are significant village sites at Kuee and at Halape. A survey of archaeological sites on the coast outside the Kalapana extension has yet to be conducted. Such a study may reveal additional archaeologically important sites as yet not known.

5. Page 39. If Park usage increases, "complementary facilities will be developed both inside and outside the Park on non-wilderness land..." "Such facilities include hotels, restaurants, shops..." These types of facilities should be kept outside the Park. While visitor facilities are permissible in zonal categories I and II of the National Park systems, development of private resort facilities at the Kalapana and the Ka'u ends of the National Parks boundaries preclude the necessity for having additional facilities within the Park.



RAYMOND H. SUEFUJI  
Director

VG:RN:LR:mm

cc: State Clearing House Agency - DPED

APPROVED:

  
\_\_\_\_\_  
Mayor



Suite 572 / Alexander Young Building / Honolulu, Hawaii 96813  
Phone 524-4660/524-4661/524-4662

February 11, 1974

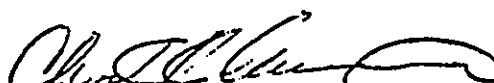
Hearing Officer  
c/o Superintendent  
Hawaii Volcanoes National Park  
Pacific International Building  
677 Ala Moana Boulevard, Suite 512  
Honolulu, HI 96813

Dear Sir:

The purposes of the ALOHA ASSOCIATION are "to protect all existing land, water, and mineral rights of persons of Hawaiian descent, and to support the presentation of claims to the United States Congress and the State of Hawaii for the settlement of all native Hawaiian claims for land and water rights and the restoration of as much land as possible to the ownership and control of persons of Hawaiian descent."

Because of the purposes of our organization, and because legislation is still in the process of being drafted, it is possible that the land areas under consideration may become subject to question. For this reason, we hope to keep informed as to all proposed actions, testimony, and decisions regarding any land in which the Federal government and the State of Hawaii are to be involved. The Board of Directors of ALOHA, through its officers and attorneys, will be following these proceedings and any other similar hearings with keen interest.

Sincerely,

  
Charles K. Maxwell  
President  
ALOHA ASSOCIATION, INC.

CKM/cb



**TITLE:** REACTION OF THE CONGRESS OF THE  
HAWAIIAN PEOPLE TO THE NATIONAL  
PARK SYSTEM ON THE ISLAND OF HAWAII

**SUBMITTED BY:** THE CONGRESS OF THE HAWAIIAN  
PEOPLE AT THE OPEN MEETING  
IN HILO ON MARCH 3, 1973  
CONDUCTED BY REPRESENTATIVES  
OF THE HAWAII VOLCANOES NATIONAL  
PARK

**Prepared by:**

Alma Kaiama Cooper, Co-Chairman, Historic  
Sites Committee

Alfka Cooper, Co-Chairman, Historic Sites  
Committee

This impact statement is titled, "Reaction of the Congress of the Hawaiian People to the National Park System on the Island of Hawaii."

It is fitting and proper that this document is presented at this open meeting in Hilo on this Saturday, March 3, 1973 for it is the purpose of this meeting for "interested persons to voice views regarding the designation of wilderness areas and development of a master plan at Hawaii Volcanoes National Park."

It is precisely appropriate that the CONGRESS OF THE HAWAIIAN PEOPLE submit this impact statement, for the total area embodied within the boundaries designated as the Hawaii National Park System was once crown and government lands of the Hawaiian Monarchy or were owned by Native Hawaiian people. This concept of original ownership is significant to the rising issue of the title rights of the descendants of the aboriginal people based upon aboriginal use and occupancy. The CONGRESS OF THE HAWAIIAN PEOPLE is an organization whose membership is made up of the descendants of the aboriginal people of the Hawaiian Islands.

"Formed in October 1971, The Congress has as its major purpose: To seek solutions to problems affecting the economic, social and educational welfare of the Hawaiian people and to bring about the uplift of our people.

Further, The Congress will promote cultural identity and pride among the Hawaiian people by highlighting and perpetuating Hawaiian heritage programs.

Additionally, by the mandates of its constitution, The Congress will encourage and support the involvement and participation of Hawaiians in forming public policies and decisions which may affect their welfare."<sup>1</sup>

The CONGRESS OF THE HAWAIIAN PEOPLE is the organization that led the public campaign to preserve Kaloko Fish Pond and the Honokohau Settlement National Historic Landmark in its entirety. This concerted public campaign for preservation of a significant landmark recorded in the National Register resulted in the passage of H.R. 11774 and the signing of this bill by President Richard Nixon on June 30, 1972.<sup>2</sup>

In the annals of its events as related to the issue of the Honokohau Settlement National Historic Landmark in which is situated Kaloko Pond, the CONGRESS OF HAWAIIAN PEOPLE has recorded a significant entry. On November 3, 1971, six Hawaiians appeared before the Advisory Council on Historic Preservation in Washington, D.C. Retired Colonel Arthur Chun, Charles Hoopai, George Penehaka, Isaiah Kaaihue, Alma Cooper, and Alika Cooper presented their substantiated case against the Kona Coast Development Co. and its proposed alteration to Kaloko Pond and its proposed commercial development within this National Landmark. The Hawaiian contingency and Representative Patsy T. Mink were

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<sup>1</sup>Agard, John M., First Vice President, Congress of the Hawaiian People.

<sup>2</sup>H.R. 11774 was introduced by Representative Patsy T. Mink on November 15, 1971.

able to show that the proposed development plans would create  
ADVERSE EFFECT upon this property which is registered in  
the National Registry.

In accordance with the National Historic Preservation Act of  
1966 (80 Stat. 915), the Effect Criteria are defined as follows:

Effect - A federally financed or licensed undertaking  
shall be considered to have an effect on a National  
Register listing (districts, sites, buildings, structures,  
and objects including their settings) when any condition  
of the undertaking creates a change in the quality of the  
historical, architectural, archeological or cultural  
character that qualified the property under the National  
Register criteria\* for listing in the National Register.

Adverse Effect - Generally, adverse effect occurs in  
conditions which include but are not limited to:

- a. destruction or alteration of all or part of a property;
- b. isolation from or alteration of its surrounding  
environment;
- c. introduction of visual, audible, or atmospheric  
elements that are out of character with the property  
and its setting.

It is the purposed intent of this impact statement to  
introduce the claims of the CONGRESS OF THE HAWAIIAN PEOPLE that  
the National Park Service on the island of Hawaii has in fact  
violated the EFFECT CRITERIA that have been prepared by the  
National office of the National Park Service and to show just  
cause for such claims. It is the further intent of the CONGRESS

\*These criteria have been prepared by the National Park Service  
for the use in evaluating properties nominated to the Secretary  
of the Interior for inclusion in the National Register.

OF THE HAWAIIAN PEOPLE to mandate to its own body and to the Hawaii sector of the Park Service that the said claims and grievances be presented to the Secretary of Interior, his staff, and to the National Advisory Council on Historic Preservation. Furthermore, the CONGRESS OF THE HAWAIIAN PEOPLE recommends that the Department of Interior extend an invitation to three to five persons from the CONGRESS OF THE HAWAIIAN PEOPLE to Washington, D.C., whereupon the problems, claims, and grievances will be presented to the Secretary of Interior.

It is right that at this late date, that the Secretary of Interior hear the claims and grievances of the CONGRESS OF THE HAWAIIAN PEOPLE for the local representatives of the National Park Service have failed in every instant, to confer with representatives of this Hawaiian Organization who as individuals and as members have been claimants since 1970.

The CONGRESS OF THE HAWAIIAN PEOPLE is aware that the officials of this open meeting on this day of March 3, 1973 have publicly designated that the Hawaii Volcanoes National Park shall be the subject for public expression. However, the CONGRESS OF THE HAWAIIAN PEOPLE chooses to include the total National Park System on this Island of Hawaii in this impact statement. The intent and expectations of the CONGRESS OF THE HAWAIIAN PEOPLE can be best presented as designed.

The National Park Service controls slightly more than 220,000 acres on the Island of Hawaii. Situated within these park lands are significant religious and cultural sites. They are Wahaula Heiau, Puuloa Petroglyphs, Kaimu Village, Kealakomo Village, Kahue Village, Kilauea Volcano, City of Refuge, Puukohola Heiau, and Mailekini Heiaus.

To apply the ADVERSE EFFECT criteria to the undertakings in particular areas of significant religious and cultural history, each area and the undertakings within, shall be discussed individually. In addition, the symbols a, b, c, will be placed after each statement of the undertaking to indicate the appropriate adverse condition.

Adverse Effect - Generally, adverse effect occurs in conditions which include but are not limited to:

- a. destruction or alteration of all or part of a property;
- b. isolation from or alteration of its surrounding environment;
- c. introduction of visual, audible, or atmospheric elements that are out of character with the property and its setting.

#### WAHAULA HEIAU AND THE KALAPANA INTERPRETIVE CENTER:

Wahaula Heiau is believed to have been built in or before the 13th century by Paao. Paao introduced and carried on the ancient religion and its defined order at this heiau. It has been recorded

<sup>3</sup>National Historic Preservation Act of 1966 (80 Stat. 915).



that Wahaula Heiau was probably "the last heiau in which worship was publicly offered to the Hawaiian Gods."

UNDERTAKINGS THAT CAUSE ADVERSE EFFECT:

1. The architecture of the Interpretive Center is closely akin to a Japanese Tea House. (b, c)
2. Lavatories in the Interpretive Center are directly over the ancient Hawaiian trail. (a, b, c)
3. The Interpretive Center is too close to the Wahaula Heiau. (a, b, c)
4. The displays in the Interpretive Center are of general Hawaiiana that bypass the particular historical details of Paoa and others who followed him and the significant environment in which the heiau is located. (a, b, c)
5. The interpretive displays are of stylistic design that are inappropriate. Some of the narrative and labels are misleading and inaccurate. (b, c)

According to Kenneth P. Emory, retired anthropologist of the Bishop Museum, "The legitimate complaint is in the art work displayed to give the Hawaiian background. This was done in San Francisco by artists lacking in knowledge of Hawaiian plants and insensitive to the physical characteristics of the Hawaiians."

6. Asphalt paved walkways through the three terraces of the heiau was built for the convenience of the visitors. (a, b, c)

Robert L. Barrel, General Superintendent, National Park Service, wrote on November 5, 1970, "The asphalt walks were put down on top of a carefully laid crushed-rock layer, thus separating the asphalt from the original surface, after serious consideration of the problems of protecting a significant site."

Kenneth P. Emory wrote, "It may have been a mistake to apply asphalt to the walkways around Wahaula Heiau, but it was necessary to have walkways so that visitors would not climb over the sites."

#### CITY OF REFUGE AND THE INTERPRETIVE CENTER

The name City of Refuge is a misnomer. The proper name for this religious and cultural area is Hoonāunau. This area was probably established in the 1400's by the kings and chiefs as a sanctuary for non-combatants, defeated soldiers, and for the kapu breakers. There were at least five other refuges on the Island of Hawaii, one in every major district, and the "City of Refuge" or Hoonāunau is the only one to have survived almost intact.

#### UNDERTAKINGS THAT CAUSE ADVERSE EFFECT:

1. Burials and petroglyphs were covered with asphalt to construct the parking lot. (a, b, c)

Kenneth Emory wrote, "The scattered petroglyphs at Honaunau obliterated by the parking lot and the burials in cracks and under rocks and some cairns were each and everyone thoroughly recorded."

Robert L. Barrel, Superintendent, National Park Service, has written, "The City of Refuge parking lot at Honaunau was carefully designed around the petroglyphs and, I have been assured, did not destroy any of them."

2. The Interpretive Center does not fit into the environment and setting. (a, b, c)
3. The restoration of the Alealea Heiau resulted in the removal of rocks from the structure. When the rocks were replaced and cemented to fit into stabilized security, approximately four truck loads of rocks that were originally a part of this heiau, were removed from the grounds and dumped elsewhere. (a, b, c) The reconstructed wall of this heiau is no longer straight and the cemented work is totally adverse to this historical structure. (a, b, c)

4. The Great Wall surrounding the refuge area was "opened" in one section to make way for a passage way. Rocks from the Great Wall, a historical structure, were removed to allow for this opening. (a, b, c)
5. The Mamalahoa Trail, a public right of way, significantly important to the native Hawaiians, has been filled with sand and coral, material foreign and non conforming to this site. (a, b, c)
6. The fish pond in the palace grounds is left largely unattended and with fish foreign to a Hawaiian fish pond. (c)

#### THE PUULOA PETROGLYPH AREA

The Puuloa Petroglypharea contains the largest concentration of petroglyphs since the field at Anaehoomalu has been largely destroyed by the commercial developers who are owners of the property. The Puuloa Petroglyphs include a large field of figures, patterns, and dots. On the top of the hillside are thousands of dots and rings, ranging in size from one to six inches in diameter, on the surface of pahoe-hoe lava.

#### ADVERSE EFFECT CAUSED BY FAILURE TO UNDERTAKE RECOMMENDATIONS:

The Park Service is guilty of creating adverse effect in this area by failing to effectualize an early recommendation by representatives of Hawaiian people. The recommendation was for the construction and installation of an elevated wooden walk for public use and for the protection of the petroglyphs. Failing to implement this recommendation, adverse effect caused by the careless walk of visitors on the petroglyphs has resulted in the erosion and in many cases, the destruction of these early pictorial remains. (a, c)

#### KAHUE VILLAGE

The failure of the Park Service to record the site of Kahue Village before the flow of the volcano covered it, four years ago, contributes to a crucial and total loss of a historical site. In this instant, the failure to conduct an archeological study, critical in nature because of the location of the site in the volcano prone area, has resulted in an adverse situation that can never be regained. (a)

#### KEANA VILLAGE

The village of Kaena was also destroyed by the volcano last year.. Although this area was surveyed and recorded by another agency some years before its destruction by the volcano, this study is inadequate. The Park Service failed to undertake its own archeological survey and recording. This failure to undertake this survey has resulted in an adverse situation that is totally lost and can not be regained.

#### KEALAKOMO VILLAGE

The request for an archeological survey and recording of the Kealakomo Village was made to the Park Service by Alika Cooper, Historical Sites Co-Chairman, Congress of the Hawaiian People, when the on coming threat of the volcano flow appeared to be leading to the village. It took four weeks for the park archeologist to begin his work at Kealakomo Village. To this date, no report of whether this study was undertaken and completed before the village was destroyed by the volcano has been received.

It is necessary at this point to strongly state that the decisions for the undertakings that have caused adverse effects in the particular instances sighted beforehand, were made by Park Service personnel. And to add further insult to injury and damages, it will be these same persons who will render the decisions for the restoration of the Puukohola and Mailekini Heiaus in Kawaihae.

At this point in this impact statement, the CONGRESS OF THE HAWAIIAN PEOPLE intends to list the following grievances:

LAND ACQUISITION AND RIGHTS FOR THE HAWAIIANS IN THE KALAPANA EXTENSION

Section 1 of the Kalapana Extension Act placed a restriction on the use of Federal money for land acquisition of the tracts to be included in the extension it provided:

That the United States shall not purchase, by appropriation of public moneys, any land within the aforesaid area (Kalapana Extension), but such lands shall be secured by the United States only by public and private donations.

The Territory and, later, the State of Hawaii, acquired the lands of the Kalapana Extension for the United States through donation, exchange, and condemnation with purchase.<sup>4</sup>

In 1938, lands owned by the Hawaiian people in the Kalapana vicinity were condemned for 30¢ (thirty cents) to 60¢ (sixty cents) per acre. The lands that were last condemned in the late 1950's ranged up to \$16 (sixteen dollars) per acre. Today the adjoining lands sell for better than \$1. (one dollar) per square foot on the ocean front.

<sup>4</sup>The Island of Hawaii, United States Department of the Interior, National Park Service, June, 1970.

Some of the Hawaiians whose lands were condemned have not cashed their checks to date for they believe the price received was far below the realistic value of the land. In the language of the youth of this day, the condemnation of these lands in Kalapana may be aptly described as a "rip off".

This "rip off" was to have received some compensation, however. The compensation was to have been provided in Section 3 of the Kalapana Extension Act (52 Stat. 781).

Section 3 of the Kalapana Extension Act (52 Stat. 781), approved June 20, 1938, gives homesite rights to all Hawaiians and fishing rights to native Hawaiians of the Kalapana area. It reads:

Sec. 3 (a) That the Secretary of the Interior is authorized to lease, under such rules and regulations as he may deem proper, land ascertained by him to be suitable for home site purposes in the Kalapana Extension as described herein, to native Hawaiians when such occupancy does not encroach on or prevent free access to any points of historic, scientific, or scenic interest or in any manner obstruct or interfere with protection and preservation of said area as a part of Hawaii National Park; Provided, however, That occupants of homesites shall reside on the land not less than six months in any one year: And provided further, That fishing shall be permitted in said area only by native Hawaiian residents of said area or of adjacent villages and by visitors under their guidance.

(b) The term "native Hawaiian" as used in this section, means any descendant of not less than one-half part of the blood of the races inhabiting the Hawaiian Islands previous to 1778. (16 U.S.C. sec. 396a).<sup>5</sup>

<sup>5</sup>The Island of Hawaii, United States Department of the Interior, National Park Service, June, 1970.

Since 1938, the National Park Service, has failed to present a plan for the designation of the land areas for inclusion of the homesites and has failed to properly advertise the homesite provision to generate applicant requests. Failing to fulfill their legal and moral obligations as provided in Section 3 of the Kalapana Extension Act, the Island of Hawaii, a United States Department of the Interior publication, states on page 46, the following:

The Kalapana Extension Act permits homesites for native Hawaiians on all land which it authorized for addition to the park. (See legal factors under basic data, this report). No application for homesites have been made and it is unlikely any will. It is recommended that the provision be repealed by legislation to protect potential wilderness areas and to prevent a nonconforming use.

The reasons for the lack of applications for homesites warrants investigation. In 1970 however, when this homesite provision was known for the first time by some of the Hawaiian people who read the Island of Hawaii, applications were submitted to the Park Service in the Volcanoes National Park and to the Secretary of Interior. In both counts, the parties filing applications were politely dismissed from any or all constructive help to implement their request for homesites.

THE CONGRESS OF HAWAIIAN PEOPLE hereby mandate the Department of Interior to present a constructive plan for the implementation of the Kalapana Extension Act which permits homesites for all Hawaiians as recorded in Section 3.

It is necessary for the CONGRESS OF HAWAIIAN PEOPLE to present a second grievance, crucial to descendants of the aboriginal people. This grievance is pointed directly to the endorsement and approval of the research proposal submitted to the National Science Foundation titled, "An Investigation of the Hydrothermal Systems at Kilauea Volcano, Hawaii" proposed by the Colorado School of Mines, Golden, Colorado. The intent of this proposal that is scheduled to begin shortly is explained as:

"The first part involves the study of a geothermal system in a well studied and geologically simple environment -- Kilauea Volcano. It is planned that exploration techniques and strategies may be tested here, once it has been established by drilling that in fact a geothermal system exists. Inasmuch as the test area lies in a National Park, there is no intention of suggesting that the system be used to produce power. Quite the contrary, being in a national preserve, the Kilauea geothermal system will assuredly not be altered by production practices, and can remain a prototype for testing geothermal exploration and evaluation techniques for many years.

However, a prototype is of no use unless some application can be made of the things learned from it. Therefore, we are proposing a second part of this program -- an application of current prospecting techniques to a potentially productive area of Oregon."<sup>6</sup>

THE CONGRESS OF THE HAWAIIAN PEOPLE subject the proposed investigation of the hydrothermal systems at Kilauea Volcano to the following strong criticisms and equally strong mandates. These criticisms and mandates are ours to make by virtue of

<sup>6</sup>Research Proposal Submitted To The National Science Foundation, Submitted by Colorado School of Mines, February, 1972.



"aboriginal use and occupancy of lands, creates rights in that land". Our ancestors walked the lands of Kilauea Volcano in humble respect to their goddess, Pele. Kilauea Volcano and the areas surrounding is a religious sanctuary. Our ancestors also used the natural elements such as steam in their life and for their religious and cultural purposes. We are further able to present our strong criticisms and equally strong mandates for there<sup>is</sup> considerable doubt that the Republic of Hawaii, the government that abrogated the Hawaiian Monarchy, against the consent of Queen Liliuokalani and the Hawaiian people, was the lawfull and rightfull owner of the land that they ceded to the United States Government in Article II in the Treaty of Annexation which reads in part:

The Republic of Hawaii also cedes and hereby transfers to the United States the absolute fee and ownership of all public, government or crown lands, --- together with every right and appurtenance thereunto appertaining; Therefore

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,  
... that all and singular the property and rights hereinbefore mentioned are vested in the United States of America.

As a result of this enactment, the President of the United States signed into law, the establishment of the Hawaii National Park. Approximately 53,785 acres of land on the island of Hawaii was defined by metes and bounds for inclusion in the Hawaii National Park.

The criticisms waged by the CONGRESS OF THE HAWAIIAN PEOPLE are as follows:

1. The decision to approve this project, "An Investigation of the Hydrothermal Systems at Kilauea Volcano, Hawaii" to be conducted on the sacred, religious grounds of our ancestors, did not include the Hawaiian people or their selected representatives. Rather, the decision was made by the National Science Foundation, the Department of Interior, Union Oil, and perhaps, other representatives from large industries.
2. The Environmental Impact Study has not been circulated for public information and reaction.
3. The potential source of hydro-electric power raises the issue of ownership rights and this matter has not been resolved.

The mandates presented by the CONGRESS OF THE HAWAIIAN PEOPLE are as follows:

1. The project will not begin as scheduled in March until 60 days after the Environmental Impact Study is distributed to Hawaiian groups and all interested persons.
2. The persons and agencies associated with the project in the way of having given their approval to said project or those who will be engaged in the implementation of the project will arrange for as many meetings with a representative group to be named by the CONGRESS OF THE HAWAIIAN PEOPLE. This shall be done before the beginning of the project implementation and during the project. It shall also be necessary that all proposed undertakings must first receive approval by the members of the group to be named by THE CONGRESS OF HAWAIIAN PEOPLE.

THE CONGRESS OF THE HAWAIIAN PEOPLE, in the interest of the general welfare of the citizens of this State of Hawaii, further project the following concerns that are recommended for inclusion in the master plan for the Hawaii Volcanoes National Park.

Backcountry Areas:

1. There are presently inadequate cabins, water facilities, corral facilities, and the like, along 140 plus miles of trails. For example: There are now 4 (four) cabins in approximately 219,000 acres of land. The one cabin at Halape is locked and is not for public use. The other three cabins are located at Pepeau, Red Hill, and at the top of Mauna Loa. These cabins are in poor condition.

It is proposed that adequate cabin, water, and corral facilities be made available for use by the general public.

2. The Park Service has failed to encourage the people of Hawaii to use the backcountry. As a matter of fact, the general policies of the Park Service on this island, has been to discourage the wide use of the backcountry.

It is proposed that the master plan include the proposed programs for the use of the backcountry by the citizens of this State and the visitors to this State.

3. There is no horse or mule concession in the park although there are 219,000 acres of backcountry wilderness.

It is proposed that a horse or mule concession be made available to the business entrepreneur as defined in President Nixon's Minority Business Enterprise program.

4. The ancient Hawaiian trails are left unattended and as a result, are inaccessible for public use.

It is proposed that these ancient Hawaiian trails be maintained for use by the general public.

5. The goat problem has continued to exist despite the programs created by the Park Service. The result of

the lack of adequate control grows increasingly obvious for native plants are destroyed and the forest line is visibly receding. It is a fair estimate to note that the goat population today is in excess of 25,000.

It is proposed that the Park Service consult with the local persons who are knowledgeable and experienced in goat control. THE CONGRESS OF HAWAIIAN PEOPLE would be qualified to formulate a practical program to bring the goat population to control proportions.

In conclusion, the CONGRESS OF THE HAWAIIAN PEOPLE believe that the contents contained within this document fall in appropriate ties with the beliefs expressed by President Richard Nixon in his Second Inaugural Address. In part, President Nixon said:

"Abroad and at home, key to those new responsibilities lies in the placing and the division of responsibility. We have lived too long with the consequences of attempt to gather all power and responsibility in Washington.

Abroad and at home, the time has come to turn away from the condescending policies of paternalism -- of "Washington knows best."

A person can be expected to act responsibly only if he has responsibility. This is human nature. So let us encourage individuals at home and nations abroad to do more for themselves, to decide more for themselves. Let us locate responsibility in more places. And let us measure what we will do for others by what they will do for themselves.

And let each of us reach out for that one precious quality government cannot provide--a new level of respect for the rights and feelings of one another, a new level of respect for the individual human dignity which is the cherished birthright of every American."

<sup>7</sup>U.S. News & World Report, February 5, 1973.

President Nixon's message is in pointed reference to the deep feelings of the CONGRESS OF THE HAWAIIAN PEOPLE. We are tired of policies that govern our ancestral sites and the management of such areas for they are made and are directed from Washington, D.C. and by people who are "foreign" to our way of life. In all of the more than fifty years that the National Park Service has been on the Island of Hawaii, there has never been a Hawaiian in top management. This is fact that is demeaning and degrading to the Hawaiian people. It is degrading for a Hawaiian to enter the premises of the Park Services to see that the persons in management are non-Hawaiians. This is fact even as these areas are of high importance and significance as Hawaiian religious and cultural sites. Therefore, in keeping with President Nixon's belief that "a person can be expected to act responsibly only if he has responsibility" and in keeping with his belief that "the time has come to turn away from the condescending policies of paternalism" <sup>paternalism</sup> that have has plagued the lives of the Hawaiian people, the CONGRESS OF THE HAWAIIAN PEOPLE mandate that all of the positions of management and supervision in the park units on this Island of Hawaii be placed with native Hawaiian people. The CONGRESS OF THE HAWAIIAN PEOPLE further mandate that proceedings for this change of management and supervisory positions be brought to the discussion table on this local level as it will be brought to the attention of the Secretary of Interior and his staff, and to the Congressional members of both houses, and to other persons who are in positions to implement this change.

It is a further mandate of the CONGRESS OF THE HAWAIIAN PEOPLE that the Secretary of the Interior create a position in the national office of the Park Service responsible for the affairs of of Hawaiian National Parks and this position shall be filled by a native Hawaiian.

It is a further mandate of the CONGRESS OF THE HAWAIIAN PEOPLE that the Hawaiian flag will be flown at each and every premise where the American flag is flown.

The final mandate to be issued in this document by the CONGRESS OF THE HAWAIIAN PEOPLE is that the Secretary of the Interior name the memberd of the Kaloko Advisory Board immediately and that the Park Service will request of Representative Patsy T. Mink that the duration for the study be extended to include a full and total year following the official organization of the Kaloko Advisory Board.

#### MANDATES OF THE CONGRESS OF THE HAWAIIAN PEOPLE

1. The said claims of ADVERSE EFFECT caused by undertakings as presented in this document shall be placed before the Secretary of the Interior, Department of the Interior, and the National Advisory Council on Historic Preservation.
2. The Department of Interior present a constructive plan for the implementation of the Kalapana Extension Act which permits homesites for all Hawaiians in Sec. 3.
3. The project, "An Investigation of the Hydrothermal Systems at Kilauea, Volcano, will not begin as scheduled and after 60 days after the Environmental Impact Study is distributed to Hawaiian groups and all interested persons will a decision on the date to commence the project be made.
4. The persons and agencies associated with the project for the investigation of the Hydrothermal System at Kilauea, Volcano", or those who will be engaged in the implementation of the project will arrange for as many meetings with a representative group to be named by the CONGRESS OF THE HAWAIIAN PEOPLE. This shall be done before the beginning of the project implementation and during the project. It shall also be necessary that all proposed undertakings must first receive approval by the members of the group to be named by THE CONGRESS OF THE HAWAIIAN PEOPLE.
5. All of the positions of management and supervision in the park units on this Island of Hawaii are to be placed with native Hawaiian people. The proceedings for this change in management and supervisory positions will be brought to the discussion table at the local and national level. Hawaiian representatives to be named by the CONGRESS OF THE HAWAIIAN PEOPLE will be at these meetings.
6. The Secretary of the Interior will create a position in the national office of the Park Service responsible for the affairs of the Hawaiian National Parks and this position shall be filled by a native Hawaiian.
7. The Hawaiian flag will be flown at each and every premise in the park service where the American flag is flown.
8. The Secretary of the Interior shall name the members of the Kaloko Advisory Board immediately and the National Park Service shall request of Representative Patsy T. Mink that she introduce a bill to extend the period for the study to include a full year to commence after the official body of the Kaloko Advisory Council is formed.

STATEMENT OF THE FLORA AND FAUNA COMMITTEE OF THE EAST HAWAII  
CHAPTER OF THE CONSERVATION COUNCIL FOR HAWAII ON THE PROPOSED  
WILDERNESS PLAN FOR HAWAII VOLCANOES NATIONAL PARK

The main proposal of the Wilderness Study Plan of Aug. 1973 for Hawaii Volcanoes National Park has the general support of the Flora and Fauna Committee of the East Hawaii chapter of the Conservation Council for Hawaii; but we would like to make the following comments and suggestions.

In Alternative B, would its adoption further safeguard the area immediately south of Kilauea crater from possible use for the development of geothermal energy? Other than this we see no reason for including this in the wilderness area.

Could Alternative C be redrawn to permit Hawaiian homesites near the Kalapana end of the Extension area? This end will abut on the boundary, the far side of which will likely be used for subdivision purposes (outside of the Park).

Does Alternative C include the recently acquired ranch area? It is not wilderness country and plans have been discussed about making this maintenance, study and research center, using the existing buildings.

We oppose Alternative D as it prohibits the rebuilding of the popular Chain of Craters Road now overrun with new lava flows and greatly limits access to recreational areas previously enjoyed by people who cannot take long hikes.

We oppose Alternative E as there are many shore side roads, trails, parks, and other areas already in existence or planned outside of the Park for this kind of intensive visitor use. It is essential for the preservation of strand and marine shore life that as much of the coastal and tide zone area as possible be given wilderness protection.

We are in favor of Alternative F providing the jeep road corridor is closed to the public but open to Park personnel and research scientists and their guests on occasion. At this high altitude it is both inhumane and foolish to require persons who have work to do there to travel and carry everything on foot.

We oppose Alternative G for we can see no valid reason for closing the popular Milina Pali Road and lookout to the public. It is necessary also for fire protection and Park maintenance use. It can be closed in case of fire hazard or volcanic activity.

In conclusion we favor the original plan plus Alternative F with proviso stated above; or this plus a redrawn Alternative C leaving some land for possible Hawaiian settlement and some for future visitor use such as roadways to new volcanic outbreaks.

453-C Waiianuenue Ave.  
Hilo, Hawaii, 96720  
Feb. 17, 1974

Respectfully submitted,

*Helen S. Baldwin*  
Helen S. Baldwin, chairman



Friends of the Earth  
arizona branch  
p.o. box 1893  
scottsdale, az 85252

March 10, 1974

Hearing Officer  
c/o Superintendent  
Hawaii Volcanoes National Park  
Pacific International Building  
Honolulu, Hawaii 96813

Dear Sir:

Please include this letter in the official hearing record as Arizona Friends of the Earth's position on the proposed wilderness designation for Hawaii Volcanoes National Park.

We support the Park Service's plan to include 123,000 acres in wilderness status. We don't, however, agree with the need for special language in the legislation which would exempt existing structures and proposed activities. We believe that the language of the Wilderness Act is already flexible enough to permit such administrative and "established use" activities.

Thank you very much.

Yours for a better Earth.

*Kevin Dahl*

Kevin Dahl, Chairman  
Land Use Task Force



For the Better Protection of Wildlife in Hawaii  
**HAWAII AUDUBON SOCIETY**

P. O. Box 5032  
HONOLULU, HAWAII 96814

February 20, 1974

Director, Western Region  
National Park Service  
Department of the Interior

Statement for the Public Hearing on Proposed WILDERNESS AREAS of the  
HAWAII VOLCANOES NATIONAL PARK, Hawaii

The Hawaii Audubon Society has reviewed the Draft Environmental Statement and the Wilderness Study and gives full support to the findings that:  
"Significant portions of the volcanic features, rain forest, and Pacific Ocean shoreline in Hawaii Volcanoes National Park on the Island of Hawaii have been found suitable for preservation as wilderness, and are proposed for inclusion in the National Wilderness Preservation System."

The following comments and recommendations relate to management of the wilderness areas and provisions of the wilderness proposal to be submitted to the Congress.

From our knowledge of the areas involved, and from study of the Service's "Guidelines for Wilderness Proposals," we conclude that all four of the special provisions for management should be specifically written out in the legislation that designates wilderness status. It is necessary to include these provisions because of the singular character of this park's wilderness. Without these provisions in the statute, park management that is based on them could be denied at a later time or simply not carried out.

(1) Without the provision for unobtrusive catchment of rain water on the coastal wilderness, even light visitor use would be unduly restricted.

(2) The geological and volcanic research by the U.S. Geological Survey is of such importance to Hawaii and the nation, that the minimum tools, instruments and vehicular access in Unit 2 should be specially allowed. While maintaining the jeep road on the north side of Mauna Loa to the summit may be a necessary facility for weather observatory personnel, strong arguments for this exception are not presented. If such road use is allowed, there must be effective safeguards to insure that such travel is not abused. It must not become a route for recreation use by vehicles.

(3) Including provisions now for the later wilderness status of the two parcels to be acquired by the park will quicken the process, avoid duplication of labor, reduce costs, and relieve the park and public of unnecessary paperwork. The 5,800 acre tract in Unit 3 would be a particularly valuable wilderness addition because of the dynamic natural forces at work here. With near-continuous volcanic activity causing rapid alteration of biotic communities, this is a unique area for long-term research in the processes of regeneration, natural selection, succession, and genetic change in species in a native forest ecosystem.

(4) The special provision for minimum tools and fences to stop feral animals from entering the park wilderness is absolutely essential to wilderness designation. If this provision is not written into the legislation, eventually there could be no Hawaiian wilderness left to preserve in the park.

The provision should not only permit fences within the wilderness areas, but must constrain the park to maintain the fenced boundaries in perpetuity. The proposal to Congress should be so written that wilderness status and the special provision for tools and fences are inextricably tied together.

Since there are inevitable changes in park policy and managers, the fencing provision should be a mandatory directive to the park and not a discretionary action. The park should not only have the authority to construct and maintain fences in this wilderness, but it must be directed to do so.

If wilderness status and boundary fencing are not tied together in one package, and if wilderness designation is granted alone, the consequences could be disastrous for the wilderness itself. Future policy and funds could be directed to other projects such as visitor facilities and road construction and the fences neglected or construction halted. Volcanic eruptions could quickly alter and divert management programs and actions now aimed at restoration of endangered plant and animal communities. Considering such future possibilities as these, the present emphasis on the enhancement of native Hawaiian ecosystems, through the control of exotic populations of plants and animals, could soon decline.

Both fence construction and the internal program of feral mammal control are vital to wilderness preservation. Without both programs the present populations of goats and pigs could quickly double or triple in number. Without permanent boundary fencing, the animals have continuous open entry to wilderness lands from adjacent non-park lands. Since internal control of exotic animals is subject to the fluctuations of policies and managers, at least one control measure should be permanent and unchanging. That is the special provision in the wilderness legislation that directs the park to construct and maintain boundary and enclosure fences for the preservation of wilderness values.

With that mandatory provision in the wilderness legislation itself, there will be a permanent basis for the necessary funds to maintain the fencing project.

It is assumed that other control programs will continue, such as goat drives and direct reduction of animals by park personnel and deputized citizens. There is no mention of how goats rounded-up in drives will be removed from wilderness areas when four-wheeled vehicles will be excluded from those areas.

The Society appreciates the opportunity to review the wilderness proposal, and we request that thoughtful consideration be given to the points raised here.

Submitted by:

*Mae E. Mull*

Mae E. Mull

Island of Hawaii Representative

P.O. Box 275

Volcano, Hawaii 96785



# Hawaiian Botanical Society

c/o DEPARTMENT OF BOTANY  
UNIVERSITY OF HAWAII  
HONOLULU 14, HAWAII

February 26, 1974

Hearing Officer  
c/o Superintendent, Hawaii Volcanoes National Park  
c/o Hawaii Group, National Park Service  
Pacific International Building  
677 Ala Moana Blvd., Suite 512  
Honolulu, Hawaii 96813

Dear Sir:

On behalf of the Hawaiian Botanical Society I have come here today to express our strong approval of the wilderness proposal for Hawaii Volcanoes National Park. At our last meeting the members of the society requested that I present to you our unanimous positive feelings in this regard. We look upon the wilderness addition to the Park as a step in the right direction towards the protection and preservation of our unique and endangered Hawaiian Flora for future generations to observe, admire and study. The Hawaiian Islands have the largest percentage of endemic species in the world but unfortunately many of these are few in number and many are rapidly being lost due to development, change in land use and inability to compete with the numerous accidental and intentional plant introductions of the last 200 years. The addition of wilderness areas will no doubt assist in the preservation of what remains of the native flora of the Big Island. We strongly support the proposal to establish a wilderness in the Hawaii Volcanoes National Park, Hawaii.

If any further and more detailed comments are desired I will be more than glad to provide them.

Yours sincerely,

William L. Theobald, President  
Hawaiian Botanical Society  
Associate Professor of Botany  
University of Hawaii



# HAWAII ISLAND CHAMBER OF COMMERCE

ESTABLISHED 1897 180 KINOOLE STREET ROOM 203 HILO, HAWAII 96720

March 21, 1974

Mr. Bryan Harry  
Superintendent  
Hawaii Volcanoes National Park  
HI 96718

Thank you for your invitation to testify on the proposed Hawaii Volcanoes National Park Master Plan and Wilderness Proposal.

## Summary

The Hawaii Island Chamber of Commerce is strongly in favor of both the National Park Master Plan and Wilderness Proposal but with certain amendments. We recommend the following changes:

- 1) That provision be made for access by vehicle for Volcanic Research purposes in Wilderness Units 1, 2, and 3.
- 2) That in one area where recent studies show a potential for geothermal power (Tracts 26 and 27) the expansion of the Park boundary be deferred.
- 3) That solar collector fields be made a Permitted Use on the western slopes of Mauna Loa below some aesthetically acceptable elevation.
- 4) That the Master Plan follow the recommendations made by the Hawaii Department of Highways in their letter of March 6, 1974. (Copy attached.)

## Reasons for Endorsement of Plan

The Volcanoes National Park now draws close to one million off-island visitors each year. As other areas of the Hawaiian Islands become increasingly crowded, this preserve will become increasingly important as a tourist destination.

Member, Chamber of Commerce of the United States of America

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Just as an enlarged park can cause more tourists to come to the Big Island, the economic consequences of the improvement of park facilities as outlined in the Master Plan will provide added encouragement for visitors to remain on the Big Island an extra day.

Because, 1) the long range job of salvage, preservation and presentation of Hawaiian lands is economically desirable and 2) the Hawaii Volcanoes National Park appears to be the agency best able to do it, the Hawaii Island Chamber of Commerce is in favor of the proposed Volcanoes Park Master Plan and the Wilderness Plan, subject to resolution of the three problems discussed below.

Wilderness Plan Special Provision #2

We believe that the Wilderness Plan access restrictions on Volcanic Research are not sufficiently alleviated by Special Provision #2 (top of page 2, Wilderness E.I.S.).

Aside from the employment it provides, Volcanic Research has at least two economic impacts on this island.

- 1) Hilo and many other areas on the Big Island are subject to volcanic destruction. The volcanic research activities of the United States Geological Survey and others are perhaps the most important single factor in minimizing damage to property and loss of life.

The Adverse Impact Statement on page 40, Wilderness E.I.S., says "There will...be an unavoidable increase in cost of...research programs for the

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...U. S. Geological Survey." Budgetary constraints translate "an unavoidable increase in cost" to mean "an unavoidable decrease in services."

The activities of the U. S. Geological Survey Volcanic Observatory are essential to the safety of life and property on the Big Island. We do not want restrictions that will hamper Volcanic Research.

- 2) There is probably no other place in the world so uniquely situated for basic research into use of the earth's magma as an energy resource as is the area within Hawaii Volcanoes National Park. Successful research in this field may result in future generations' best hope for low cost, non-polluting energy. It also may provide the theoretical basis for energy extraction throughout the Hawaiian Islands and from the adjacent sea floor, which could provide Hawaii with exportable energy in the form of hydrogen fuel.

Although Mauna Ulu is active today outside the proposed Wilderness area, it could stop tomorrow and the volcanic activity move only a short distance across the line into that designated for Wilderness Unit 3. At the present state of the art it is not possible to tell where in proposed Wilderness Units 1, 2, and 3 volcanic research will be necessary. The molten lava lakes required for some areas of research occur at unpredictable times and places within the Park. Volcanic researchers have a legitimate need to get their equipment to the site of activity as economically as possible. The money to

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pay for helicopters must be paid by reducing research activities. After an eruption has finished it is not particularly difficult to obliterate the rough trails used for vehicle access.

In conclusion, we believe Special Provision #2, as written, ultimately can be detrimental to the safety of life and property on the Island of Hawaii and can be a serious impediment in the basic research leading to long range, low-polluting energy from the earth's magma and development of Hawaii as an energy exporter. We urge the revision of Special Provision #2 so that it grants Volcanic Research all the rights and privileges in the Wilderness Areas that it now enjoys elsewhere in the park and specifically grants the right to have ground vehicle access to eruption sites.

Master Plan Acquisition of Tracts 26 and 27

Recent infrared aerial sensing surveys have revealed a large geothermal hot spot near Tracts 26 and 27 in the southwest corner of the present Volcanoes National Park. Inclusion of that site in the Park would put major obstacles in the path of its development for geothermal energy.

The cost of this island's oil-fueled electricity is among the highest in the world. We can ill afford to pass up any opportunity to use alternative energy sources.

Although Tracts 26 and 27 would make a natural geological addition to the park, and are already within the Authorized Park Boundary, their purchase



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March 21, 1974  
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should be delayed a sufficient length of time to permit further prospecting and development of geothermal energy, if such is feasible. If the site proves unsuitable for development of geothermal energy it could be purchased at a later date.

Master Plan Acquisition of Hualalai-Mauna Loa Complex

The solar radiation received on the high, cloudless western slopes of Mauna Loa is among the highest per unit area found in the United States.

These slopes may prove a prime area for the first major installation of solar collectors to convert sunlight directly into electricity for use in an electrical power network.

Suitably designed black collectors might have little visual impact. If their upper limit were kept at 11,000 feet they should remain invisible from the summit. Whether they were visible from the Hualalai area and elsewhere would depend a great deal on their design.


The Big Island should not give up this potential source of energy without careful study. Until that study is completed we recommend that solar collectors be included as a Permitted Use on the western slopes of Mauna Loa.

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Thank you for the opportunity to comment on the proposed Volcanoes National  
Park Master Plan and Wilderness Plan.

Very truly yours,

HAWAII ISLAND CHAMBER OF COMMERCE

  
E. H. ARAUJO  
PRESIDENT

EHA:dld

ATTACHMENT (1)

cc: Governor John A. Burns  
Mayor Shunichi Kimura  
Chairman Robert Yamada &  
Members of the County Council

Hawaii Isle Fish and Game Association  
29 Akea Street  
Hilo, Hawaii 96720

February 7, 1974

Mr. Bryan Harry  
Superintendent  
Hawaii Volcanoes National Park  
Volcano, Hawaii 96785

RE: Proposed Master Plan and Wilderness Areas

Dear Mr. Harry:


Thank you for inviting our association to make comments and recommendations to your captioned proposed plans. Also for coming down to meet with our Ad Hoc committee to study these plans.

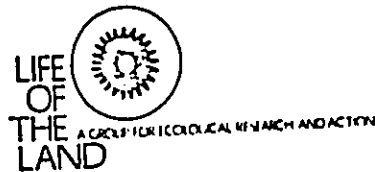
At this point, we are in general agreement and do support you in these areas. Under separate letter, we do have recommendations to your "Natural Resources Management Plan".

With best regards.

Sincerely,

Earl Pacheco  
President

  
cc: Mr. Lloyd Koffman  
Secretary



26 February 1974

Director, Western Region  
National Park Service  
Department of the Interior

Statement for the Public Hearing on the Proposed Wilderness Areas of Hawaii  
Volcanoes National Park in the 2nd floor conferenceroom, Gold Bond Building,  
677 Ala Moana Blvd., Honolulu

My name is Wayne Gagné. I have been authorized to speak on behalf of three local organizations - two community and one professional. The executive board of the Life of the Land and the Liason Committee of the Hawaiian Entomological Society have asked me to present this statement on their behalf. For the record I am also president of the Hawaii Audubon Society and wish to call attention to the remarks made by our Island of Hawaii Representative at the Wilderness Hearing in Hilo on February 20th.

We have examined the "Draft Environmental Statement" and the "Wilderness Study" regarding the Wilderness Proposal. We are generally in accord with these proposals and find that the alternatives considered, especially B through G, would detract from the general intent of the Wilderness Act.

We would like to direct specific attention to the need for special language for a program to contain the feral mammal problem, especially goats and pigs, in perpetuity. We agree that special language is needed; in fact we think that the park should be mandated through Congress with a boundary and internal fencing program to preserve the wilderness values from these exotic animals. Past efforts in this direction would indicate that the feral mammal control program proceeded more-or-less according to the interests of the various park superintendents. Hence, periods of intense goat control programs, for example, were followed an hiatus during which goat populations again exploded. Without special provisions, we anticipate that this program could repeat recent history in that it could receive attention only at the discretion of the Park Service. As long as there are alien elements present or proposed to be added (e.g. Axis deer) to the Big Island biota that are capable or potentially capable of displacing native biota, Hawaii Volcanoes National Park will need an appropriate, continuing program to protect the native assets both within the Park and at its borders to prevent entry or reinvasion.

We support also the need for special provisions to conduct volcanic and geologic research and to plan for later wilderness status of two areas to be acquired. We do not have enough data to evaluate the provision for unobstructive water catchments. The lack of same might be used in a positive manner to urge the visitor not to over stay his leave when all water has to be carried. There needs to be more detail on the need for more shelters since the climate in the park is no more rigorous than most of our mainland National Parks.

There needs to be a statement as to whether or not more trails are to be constructed. May we suggest a new one generally paralleling the Mauna Loa Strip Road so that hikers so wishing could reach the Mauna Loa Summit without setting foot on pavement.

404 PIIKOI STREET HONOLULU HAWAII 96814 TELEPHONE 521-1300

This concludes our testimony. Thank you.

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SOCIETY OF AMERICAN FORESTERS  
Hawaii Section  
1179 Punchbowl Street  
Honolulu, Hawaii 96813

February 22, 1974

Mr. Stanley W. Hulett  
Associate Director  
National Park Service  
Hawaii Volcanoes National Park  
Volcano, Hawaii 96785

Dear Mr. Hulett:

We have reviewed your report, Wilderness Study, Hawaii Volcanoes National Park.

We support your proposal, except for areas that you indicate as "Potential Wilderness Additions." We see no need for expanding the boundaries of the National Park in the Kau Desert or into "Tract 22" as outlined in your Master Plan. Current SAF Forest Policies state, in part, that "Major shifts in forest land ownership should be made only after careful study has determined that the social, economic, and managerial benefits therefrom will exceed those possible under existing ownership." This has not been shown to be the case. We further doubt that in context of a statewide assessment, this would be the highest priority use of Land and Water Conservation Funds for purchase of land for public parks.

We oppose this expansion because of (1) the excessively high costs to the taxpayers of acquiring land in Hawaii. The reduction of the private land base resulting from this expansion will raise land costs to residents. (2) Acquisition by the Park Service would make many of the multiple resources of these areas unavailable to the people of Hawaii. There are valid potentials for intensive beneficial use of these areas for recreation and other activities managed by private enterprise. There is no valid reason to forego such uses and your reports provide no justification in terms of needs, costs, or benefits.

We note that you hope to attain National Park status for the Olaa Forest tract which the Society of American Foresters has long recognized as prime rain forest area. We hope you attain this status. Justification was provided many years ago and there is no additional cost involved.

We note that your Master Plan calls for other significant additions to the Park, such as parcels 12 to 15, and the Hualalai-Upper Mauna Loa unit of 100,000 acres.

There is no adequate justification for adding parcels 12 to 15 to the National Park. Certainly the reasons are not adequate to (1) cover the high cost of acquisition and (2) justify the taking out of its present much broader use status an additional 420 acres, and the placing of these acres into a category of very limited use. This land is not of National Park quality or significance.

The Hualalai unit and access road is not needed as a National Park. We already have more than adequate representations of Hawaiian volcanism within our present parks. We do not favor the idea of expenditure of vast sums of public monies to acquire the land and build roads through the largest and most remote remaining wilderness area in Hawaii. What you are proposing here is just the opposite of what you should be supporting--i.e., the maintenance of this area in a remote status. Actually the present wilderness quality will be greatly reduced by road construction. This seems an anomaly, as other areas of the Park are concurrently being proposed for wilderness status. Leaving this area alone, in its present ownership status, offers remote recreation, hunting, some grazing, and other benefits to the people of Hawaii and the Nation. Acquisition by the Park Service would deny the bulk of this use and, in addition, require continuous large expenditure of public funds to "manage" the area for lesser benefits. This cannot be justified because there is no National importance or significance to this large area, such as is required for National Park status. Small areas, such as Ahuaumi Heiau and the Judd Trail, and some others of special floral or faunal significance, can most likely be reserved through the State Natural Area Reserve System, or the State Park System.

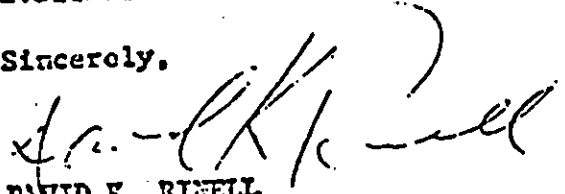
On page 19 of your Draft Environmental Statement for the Proposed Wilderness Areas, you specifically state that "Several endemic species of birds and insects have become extinct within the park and elsewhere on the Island of Hawaii because of agricultural and forestry practices which disturb native habitats and introduce competitive animals." This statement is pure conjecture. There has never been any documentation that any forestry practices in Hawaii have caused the extinction of any fauna in the Islands. You do not mention the main reason for the loss of bird life: avian diseases.

The Park Service's policy of excluding hunters has allowed build-up of goat and sheep population which have done serious damage to the vegetation. Such a management policy is in serious need of questioning. We wonder what will happen when Wilderness Area management policies further restrict the prospects of controlling feral animals. This topic is treated much too lightly in your EIS.

The statement on page 74 of the draft environmental statement of the Proposed Master Plan that "These lands proposed for acquisition would be permanently unavailable for development for strictly economic benefit" is quite correct. The lands would also not be available for at least one kind of use that isn't "strictly" economic, to use your phrase. This use is hunting.

The main economic impact on the citizens of Hawaii would be the further escalation of land prices because of such purchases against a dwindling available land base.

Sincerely,

  
DAVID K. RINELL  
Chairman

cc: Honorable Fong ✓  
Honorable Inouye  
Honorable Matsunaga  
Honorable Mink  
Honorable Brown  
Tagawa  
Honorable Kimura  
Glascok



## Southwest River Study Committee

Feb. 4, 1974

Hearing Officer  
National Park Service  
667 Ala Moana Blvd.  
Honolulu, HI 96813

Dear sir

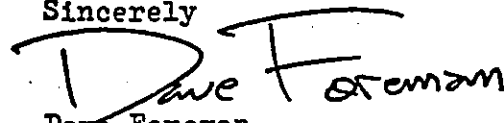
The Southwest River Study Committee is a group of whitewater boaters, fishermen, scientists, hikers, photographers, and river guides concerned with the preservation of free-flowing streams and rivers. We are also concerned with the establishment of an adequate and representative American Wilderness System.

I have studied the proposed Master Plan, Wilderness Proposal, and the accompanying environmental statements for Hawaii Volcanoes National Park. The Southwest River Study Committee is pleased to give its full support to the Park Service proposal to designate some 123,100 acres of the Park as Wilderness.

However, we do not feel that the special legislative language requested (for certain administrative facilities or activities) is necessary. We feel that the provisions of the Wilderness Act permit such things in Wilderness where necessary.

Please make this letter part of the hearing record.

Sincerely

  
Dave Foreman  
Chairman



THE WILDERNESS SOCIETY  
1901 Pennsylvania Ave., N.W.  
Washington, D. C. 20006

WILLIAM E. ACKERKNECHT  
Consultant

OIL (202) 293-2732  
Res. (703) 534-1583

Statement Respecting the Hawaii Volcanoes National Park Wilderness  
Proposal by ~~William Mull~~ of Mrs. Dorothy Babineau  
of Kailua, ~~Volcano~~, Hawaii on behalf  
of the Wilderness Society,  
Washington D.C. at the National  
Park Service Hearing, Hilo, Hawaii  
February 20, 1974

*Davis,*  
Mr. Hearing Officer, Ladies and Gentlemen:

~~Mrs. Dorothy Babineau and I am a resident of Kailua.~~  
~~My name is William Mull and I am a retiree living in Volcano.~~ I have  
been asked to appear today as a representative of The Wilderness Society,  
a 39-year old national non-profit conservation organization concerned part-  
icularly with the beneficial use and the protection of wild lands and waters  
of America and with the preservation and restoration of a healthful natural  
environment.

One of the major functions of the Society is to work with local citizens,  
like myself, and conservation groups in achieving the protection and preser-  
vation of those remnants of wilderness in national forests, parks and wild-  
life refuges and ranges. In the Wilderness Act of 1964 the citizen-conserva-  
tionist is provided with an exceptional opportunity to have a voice in the  
vital decisions affecting the management of federally owned lands, lands  
that belong to all the people. The public hearing provisions of the Act  
are also convenient and useful means whereby the federal agencies can re-  
ceive information and learn of the viewpoints of the various members of  
the public.

The Wilderness Society very much appreciates the opportunity available  
today for persons, groups and organizations to express their views on the  
potential of the Hawaii Volcanoes National Park for designation as a part  
of the National Wilderness Preservation System. The Society joins with  
the citizens of Hawaii in expressing its vigorous support of the proposal

of the National Park Service to designate as wilderness 123,100 acres of the park. These lands meet the standards for wilderness as prescribed in the Wilderness Act and are deserving of the fullest protection possible as an irreplaceable element of the Hawaiian ecology and the environment of the islands. The Wilderness Society is but one of the many conservation groups and organizations that believe the Wilderness Act to be the best vehicle presently available for giving these lands the lasting protection that is so vitally needed.

The potential for federal wilderness designation in Hawaii is limited to the remaining pristine areas of Haleakala and Hawaii Volcanoes National Parks and the Hawaiian Islands National Wildlife Refuge. Hence preservation of the unspoiled areas of Hawaii Volcanoes National Park is of more than ordinary importance to the citizens of Hawaii and indeed to all Americans everywhere. Nor should we overlook the great international interest in the unique geologic importance of the park. Mr Chairman, the exceptional and unique ecologic, geologic, archeologic and environmental values to be found in the park are quite well known to Hawaiians and to many Americans. They are an integral part of the culture, history and heritage of the KAMAAINA and are deserving of the fullest possible protection under existing laws and legislative procedure.

A lengthy descriptive dissertation for this hearing record would be superfluous for the values of the Park have been excellently presented in several publications of the National Park Service, the Hawaii Volcanoes Park Master Plan and Proposed Wilderness Areas, the respective Environmental Impact Statements, and various park leaflets. Needless to say, therefore, it is the need to preserve such values and the associated resources and the scientific potentialities that brings all of us here today. Without such

elements of our environment we are, indeed, a poor race of people no matter how great our material abundance.

While fully supporting the designation of 123,100 acres of Hawaii Volcanoes National Park as wilderness, The Wilderness Society opposes the special legislative enactment for the management measures recommended by the Park Service. Section 4[a] of the Wilderness Act declares that wilderness designation shall be "within and supplemental to the purposes for which national forests and units of the national park and wildlife refuge systems are established and administered", and that "the designation of any area of any park, monument, or other unit of the national park system as a wilderness area pursuant to this Act shall in no manner lower the standards evolved for the use and preservation of such park." While the Wilderness Act does prohibit certain uses and activities it also directs in Section 4[b] that "each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its wilderness character." Section 4[c] restricts commercial enterprises, permanent vehicle roads and structures but permits measures necessary to meet minimum requirements for administering areas for wilderness purposes including measures required in emergencies involving the health and safety of persons within the area. Certain established uses may also continue subject to administrative restrictions as set forth in Subsection 4[d] of the Act.

The Wilderness Society interprets these provisions of the Wilderness Act of 1964 to be sufficiently broad and flexible to enable a reasonable measure of discretion by the National Park Service in the management of 123,100 acres should Congress in its wisdom enact legislation adding the land to the National Wilderness Preservation System.

In considering the specific provisions proposed by the National Park Service, The Wilderness Society suggests that primitive unobtrusive shelters and rainwater collecting and storage measures are essential for the enjoyment of the park's natural features by visitors and required for their safety. Second, the establishment of Hawaii Volcanoes as a park was in recognition of its geologic importance and because of the vital need for volcanic research. Protection of the lands as wilderness enhances these objectives without degrading the purposes for which the park was established and is being administered. Third, the occasional use of the four-wheel-drive vehicle route to the summit of Mauna Loa and the occasional use of helicopters for research are but continuations of established uses for which the Wilderness Act makes specific provision. Fourth, the control of feral animals is a positive requirement to restore and preserve the native Hawaiian vegetation and the natural features of the lands proposed for wilderness. Minimum measures to accomplish such control is within the scope of the provisions of the Wilderness Act. Fifth, The Wilderness Society finds it to be entirely compatible with its objectives to add to the wilderness system the two parcels of land of 2,050 acres to Unit 2 and 5,800 acres to Unit 3 when acquired by the United States. As long as the hearing record clearly points up this intent and as long as the Congressional Committees are cognizant of this possibility, a special legislative provision is not needed to effect wilderness designation for these two tracts. With the proper background so provided, wilderness designation for these two small tracts can be effected by notification to Congress by the agency when the lands have been acquired by the United States and the official boundaries adjusted accordingly on the official maps of the wilderness.

Because of the broad and flexible nature of the Wilderness Act, the

Wilderness Society urges that the legislation needed to effect wilderness designation for Hawaii Volcanoes National Park not be complicated by any special provisions as proposed by the agency.

The Society is also in full support of the extension of the park boundary to include the Olaa forest tract. This is a subject for separate legislative consideration and action to add these lands to the National Wilderness Preservation System is not the proper vehicle for the modification of the park boundary.

In light of the many values for which Hawaii Volcanoes National Park was established and for which it is being administered, The Wilderness Society wholeheartedly supports the designation of 123,100 acres as a part of the National Wilderness Preservation System. The Society, as one of the leaders in support of the preservation of the remnants of the unspoiled natural features of our nation, believes this can be accomplished under the Wilderness Act without special provisions as recommended by the Administration.

The Society is also privileged to join with conservationists in Hawaii and throughout the other 49 states in recommending wilderness designation as the best measure presently available for assuring the perpetuation of the unique geologic, archeologic and the other natural resources of the park.

We thank the Service for this opportunity to present the views of The Society and commend the Service for its past management of the Park and for its meaningful approach to the future protection of our lands and resources.

Thank you very much.

GEORGE ALDERSON  
323 MARYLAND AVENUE, N.E.  
WASHINGTON, D.C. 20002

February 11, 1974

Hearing Officer  
National Park Service  
667 Ala Moana Blvd.  
Honolulu HI 96813

Dear Sir:

Please include this letter in the record of the hearings on wilderness proposals for Hawaii Volcanoes National Park.

I strongly favor the proposal to include 123,100 acres of Hawaii Volcanoes National Park into the National Wilderness System. These lands need the permanent protection of wilderness designation to insure that future developments, which we cannot even foresee now, will not impair the wild qualities of this great national park.

Future generations of Americans should be able to go to Hawaii Volcanoes and see the land as it was before human manipulation began to alter it.

I would caution against the proposed use of special legislative language in connection with existing facilities in these areas, such as shelters and water supply sources. These can all be accepted as existing uses under the general provisions of the Wilderness Act. It would lead to problems with many other areas if you begin to make all sorts of special provisions, instead of using the broad provisions of the Wilderness Act itself.

Sincerely,



Post Office Box 621  
Bethany, West Virginia 26032  
March 15, 1974

Hearing Officer  
c/o Superintendent  
Hawaii Volcanoes National Park  
Pacific International Building  
Honolulu, Hawaii 96813

Dear Sir:

I am writing to express my support for the 4-unit wilderness proposal put forth by the National Park Service concerning Hawaii Volcanoes National Park. As I understand it the proposal would include 123,000 of the park's 209,400 roadless acres. I spent 3 weeks in the park last year doing studies on the lava flows. It was my first trip to the Islands and I was very much impressed by the immense and unspoiled beauty of the area. I would be very much upset if any part of this area were opened up to development. I believe that it would be a great injustice to the State of Hawaii and the world in general, if the beauty of the area were to be destroyed like the once beautiful island of Oahu has been desecrated.

Thank you.

Sincerely,

*John R. Alexander*  
John R. Alexander

P. O. Box 154  
Volcano, Hawaii 96785  
U. S. A.

Feb. 4, 1974.

Hearing Officer,  
National Park Service,  
667 Ala Moana Blvd.,  
Honolulu, 96813.

Dear Sir:

Thanks to an alert from The Wilderness Society of which Mrs. Degen  
er and I have been members for many years, I have a summary regarding the  
coming National Park Service proposal to place about 123,100 acres of the  
Park into the National Wilderness Preservation System.

I am very familiar with the area, having first visited it in 1922, <sup>having</sup> been  
Ranger-Naturalist in 1929 under Supt. Tom Allen, having resided in the old  
Volcano House in 1930 to write my "Plants Hawaii National Park" book, and  
having published "Caveat Emptor" in 1970.

~~There is just one addition to the proposal I wish to make. It states~~  
that the area shall have facilities to control exotic foral animals. I  
propose this statement to be modified to read "FERAL ANIMALS AND PLANTS."

Regarding the above, I am of course alluding to such weeds as the "ba-  
nana poka" (Passiflora) and fire thorn (Pyracantha) encroaching into the  
Wilderness Area off Wright Road, Loniciera and firebush (Myrica) south of  
the Chain of Craters Road, Himalayan and other introduced Rubus species,  
and countless other weeds that may creep into the area any day in the fut-  
ure.

Aloha,  
*Dr. Otto Degener*

Botanist, University of Hawaii, 1925-27  
Ranger-Naturalist, Hawaii Nat. Park, 1929  
Collaborator in Haw. Botany, New York Bot. Garden 1933-  
Author: Flora Hawaiensis. Vols. 1-6, etc.



slippery rock state college



DEPARTMENT OF BIOLOGY

22 Jan. 1974

Hearings Officer  
c/o the Superintendent  
Hawaii Volcanoes National Park  
Pacific International Building  
677 Ala Moana Boulevard Suite 512  
Honolulu, Hawaii 96813

Dear Sir:

Would you please include the following statement in the hearing record on the wilderness proposal for Hawaii Volcanoes National Park.

The designation of lands as wilderness is essential not only for the recreational needs of the present and future but also to insure the preservation of wild and natural habitats. It will be through such protection that representative ecosystems and biotic communities will be preserved. This is especially critical on the Islands because of the drastic and widespread alternation of natural environments which is so wide spread and increasing. I strongly support the wilderness proposal but suggest the following alterations:

1. Inclusions of portions of the Kalapana Extension. It is a mockery to consider that homesite would not impinge on biological, scenic and historic values. What advantage has been taken to date? This portion of the enabling act of the park should be altered and the tract managed as a meaningful part of the park. Should this be done, then it would imperative to exclude the proposed road and administer the tract as a wilderness unit.
2. Include the Hilina Pali Road Corridor in wilderness. The Park Service sometimes seems to forget that Hawaii is blessed with great scenic resources, extensive road systems, and a multitude of opportunities for roadside recreation while at the same time little of the land is really safe from development. The Wilderness resource is exceptionally important so why bisect a wilderness tract for one more view point. The economics of management of the backcountry minus the road certainly is no more serious than that necessary where far larger wilderness tracts are conserved.

Sincerely

A handwritten signature in dark ink, appearing to read "K S Erdman", is written over the typed name.

Dr. Kimball S. Erdman  
Professor of Biology

A-95

slippery rock, pennsylvania 16057

4000 4th Ave., North  
Great Falls, Montana 59401

Hearings Officer  
c/o Superintendent  
Hawaii Volcanoes National Park  
Hawaii 96718

March 26, 1974

Dear Sir,

It is my opinion that increased development within the Hawaii Volcanoes National Park will decrease the value of the Park and, therefore, I do not support the road extension or other developments. Instead I support that the maximum possible acreage be given Wilderness designation. Also I would like to encourage that feral animals and plants continue to be eliminated whenever encountered and that increased effort be made in this area.

Sincerely,

*Thomas E. Horobik*  
Thomas F. Horobik

January 5, 1974  
313 Briarwood Trace, Rt. #2  
Carbondale, Illinois 62901

Hearings Officer  
c/o Superintendent  
Hawaii Volcanoes National Park  
Hawaii 96718

Dear Sir:

Would you please include this letter as a part of the official public record concerning the wilderness proposal for Hawaii Volcanoes National Park.

I would like to add my support to any final proposal made by either the Sierra Club or the Wilderness Society or a joint proposal made by the combined effort of the two organizations. Should there be no final draft submitted by conservationists I would like to submit the following comments:

I would like to support alternative "D" as it appears in the, "Draft Environmental Statement, Proposed Wilderness Areas", and alternative "G".

In addition, I would like to support the recommendation that approximately 193,000 acres be added to the Park in the area of Hualalai Summit and the 'saddle' area between Mauna Loa and Hualalai Summit, at least, 5,000 acres of Honaunau Forest and 5,400 acres of water and that all of this land receive wilderness classification.

Thirdly, I support the addition of the Kapapala Ranch and Kapapala Forest Reserve lands and recommend that all of these lands be added to the wilderness areas of the Park.

Lastly, I support the idea of placing all unique and presently threatened de facto wild areas within Park boundaries—even though they may not be contiguous with present Park boundaries—and designating these areas with official wilderness classification.

Specifically, I support the concept of combining both the Kilauea Forest Reserve and the Olaa Forest as one single unit of National Park land while at the same time relocating the present boundaries of the new combined area on more easily defined topographical boundaries. This would, in effect, necessitate the acquisition of as much contiguous land that exists between the two separate single units of forest and any additional surrounding land which would qualify for purchase in the future.

I would like to ask that all of the above statements be included with the Sierra Club/Wilderness Society proposal if they are not already a part of their final draft.

Thank you for letting me comment on the, "Wilderness Study", for Hawaii Volcanoes National Park.

Respectively,

*Bruce A. Jacobsen*

Bruce A. Jacobsen

:j

1415 Victoria St.  
Apt. 1001  
Honolulu, HI  
8 January, 1974

Mr. Robert Barrel, State Director  
National Park Service  
Suite 512  
667 Ala Moana Building  
Honolulu, Hawaii

Dear Mr. Barrel:

This letter will confirm our conversation concerning the Draft Environmental Impact Statement for Proposed Wilderness Areas—Hawaii Volcanoes National Park.

On page 19 is the following statement, "Several endemic species of birds and insects have become extinct within the park and elsewhere on the Island of Hawaii because of agricultural and forestry practices which disturb native habitat and introduce competitive animals."

I accept your assurance that, insofar as forestry is concerned, the above remark was inadvertent and should be corrected. You and I personally seem to be in full agreement on this point. However, let me as a matter of record explain how far from the truth this reference to forestry is and what are the facts.

1. I know of no documented instance in which any bird or insect has become extinct in Hawaii as a consequence of forestry practices. Forestry is the science and art of managing forests. The early logging and land clearing in Hawaii can in no way be regarded as "forestry practices." This would be like listing vandalism as a form of recreation in a park.
2. Published reports indicate that the last known instance of an indigenous species of bird becoming extinct in Hawaii was about 1935. In recent years, several presumably extinct species have been "re-discovered" and in 1973, a previously unknown new species was found! Most of the re-discoveries as well as the new find were made within the State Forest Reserves.
3. Since its inception in 1903, the primary functions of the Division of Forestry have been custodial and protective. I believe that as a result of control of trespass, elimination of feral cattle, and protection from fire, the natural biotic communities of the Forest Reserves are in much better condition today than if they had been left unregulated and unprotected. Protection is still the dominant objective, although within the past 15 years, a very modest program of tree planting was undertaken along with increased emphasis upon development of recreational opportunities. I am aware that these new programs have stirred criticism from some individuals, but such actions could not possibly have affected events that occurred 38 or more years ago.

Mr. Barrel, page two.

4. The Division of Forestry has never introduced birds or other animals to compete with native birdlife as far as I have ever heard or read. On the other hand, foresters have conducted massive programs to control feral livestock, particularly cattle, sheep and goats. Altogether, the Division has destroyed or removed from the Forest Reserves about a quarter million feral animals.

As a former member of the Hawaii Division of Forestry who is now retired, I can speak freely on matters such as this without any appearance of conflict of interest. One of my greatest pleasures is to recall the efforts of foresters, including myself, to protect and wisely manage our natural resources. I earnestly hope that you will correct the erroneous statement that forestry in Hawaii has harmed native birdlife.

Yours very sincerely



RUSSELL K. LeBARON



1110 DENVER CLUB BUILDING  
518 SEVENTEENTH STREET  
DENVER, COLORADO 80202  
TELEPHONE 303--573-3665

November 14, 1973

Superintendent  
Hawaii Volcanoes National Park  
Hawaii 96718

Dear Sir:

In reference to the following:

1. Proposed Master Plan For Hawaii Volcanoes National Park, Hawaii -  
Draft Environmental Statement
2. Proposed Natural Resources Management Plan, Hawaii Volcanoes National  
Park, Hawaii - Draft Environmental Statement
3. Proposed Wilderness Areas, Hawaii Volcanoes National Park, Hawaii -  
Draft Environmental Statement

I would appreciate it if you would consider the following comments.

Although the energy requirements for the State of Hawaii appear to be less demanding than those of the continental United States, Hawaii is now very dependant upon imported energy in the form of oil and gas. This source is rapidly dwindling and forecasts a severe inflation and potential depression of your local economy.

The major hope for a viable energy source in Hawaii is the development of geothermal energy.

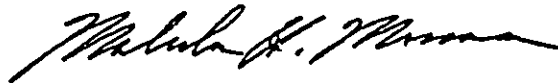
I would strongly urge you to consider the human needs as part of your evaluation. Much of the land you are proposing as wilderness area has geothermal potential. It is possible to devise a plan that provides for the development of the geothermal potential along with: the development and control of exotic plant and animal species; the propagation of rare and endangered plant species, reintroducing rare plants into former range, protecting rare edemic biota from depredation from feral goats and pigs, and re-establishing and nurturing remnants of edemic Hawaiian ecosystems.

May I commend to you a course of action that considers both the human needs and the biota needs and puts them both in gear with each other. The establishment of wilderness areas does not accomplish this.

Superintendent  
Hawaii Volcanoes National Park  
Page 2

Sincerely yours,

THE ANSCHUTZ CORPORATION



Malcolm H. Mossman

MHM/sp

cc: John A. Love  
Assistant to the President  
for Energy Policy

Sen. Daniel K. Inouye  
Senator for Hawaii

Congressman Don Brotzman  
Second District, Colorado



Statement for Public Hearing on PROPOSED WILDERNESS AREAS of Hawaii Volcanoes  
National Park, February 20, 1974, Hilo, Hawaii

My name is William Mull. I am a resident of Volcano. I spend virtually all my time on biological field work in or near the Park -- and I intend to continue doing this for the rest of my life.

I strongly support the Wilderness Proposal, and I commend the present Park administration -- both for their perception of the fragility of native ecosystems within the Park and for their determination to protect these native plant and animal communities from foreign plant and animal invaders.

Even so, I think the Proposal has two significant weak spots on these points.

First, it understates the uniqueness and potential scientific value to mankind of these oceanic island ecosystems and their remarkable plant and animal components. I think it important for Congress to have a more complete and explicit picture of the biological wonders that are being proposed here for congressional protection.

Second, the Special Provision for feral animal control measures is cast in such a way that it might be interpreted solely as permission to undertake special control measures. In view of the necessity for vigorous, long-term pursuit of this program if these native ecosystems are to survive, I think it essential that this most important of the four Special Provisions be cast as a congressional directive, rather than as a congressional permit.

In my view, the Wilderness Proposal will have a much better chance, both for congressional approval and for insured long-term effectiveness in achieving its purpose, if strengthened in these two ways.

I'll resist the temptation to elaborate on these points at this hearing -- and simply offer to work with the Park administration in any way I can to provide Congress a more definitive perspective on these two aspects of the Proposal for their deliberation.

Thank you.

*William P. Mull*  
William P. Mull  
P.O. Box 275  
Volcano, HI 96785

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The Department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

Publication services were provided by the graphics staff of the Denver Service Center. NPS 518